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Association of
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Scientific Abstracts of 40th Annual Conference of Association of Oral and Maxillofacial Surgeons of India, 19th to 21st November 2015

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JMOSI is a quarterly journal offering comprehensive coverage on new techniques, recent developments and innovative contributions on oral and maxillofacial surgery. The journal publishes papers of high scientific merit and widest possible scope on oral and maxillofacial surgery. Clinical articles help develop the methods used to handle dentoalveolar surgery, facial injuries and deformities, TMJ disorders, oral cancer, jaw reconstruction, anesthesia and analgesia. The journal also includes specificities on new instruments and diagnostic equipment and modern therapeutic drugs and devices.

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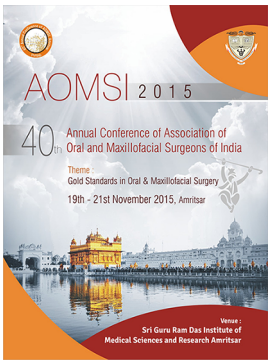

Scientific Abstracts of 40th Annual Conference of Association of Oral and Maxillofacial Surgeons of India

Theme Gold Standards in Oral and Maxillofacial Surgery
19th to 21st November 2015
Sri Guru Ram Das Institute of Medical Sciences and Research, Amritsar

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Editorial

The Association of Oral and Maxillofacial Surgeons of India (AOMSI) successfully conducted its 40th Annual conference in Amritsar, with the theme ***"Gold standards in Oral and Maxillofacial Surgery"*** from 19th to 21st November 2015 at the sprawling campus of Sri Guru Ram Das Institute of Medical Sciences and Research. It is for the first time that the city of "The Golden Temple" has played host to such a didactic event. The annual conference was well attended with more than 1400 registered delegates including Post-graduate students and Traders from various parts of the country. It was indeed one of the most well attended conferences of AOMSI in recent times. It turned out to be a unique platform to exchange knowledge, share education and experiences and review the current concepts of the specialty with dedicated eminent personalities from India and Overseas.

Prestigious "Dr MSN Ginwalla" Oration was given by **Dr Rajiv M Borle**. The theme of this wonderful oration lecture was "**Ethos of Education and Professional Life**". His talk left the audience enthralled with inspirational and social aspects of teaching in oral and maxillofacial surgery.

Scientific Sessions & Deliberations

The scientific committee put up a very comprehensive Scientific Programme for 20th–21st November, covering all the Key topics in Oral and Maxillofacial Surgery. The series of sessions like ***Technological advances in Oral & Maxillofacial Surgery***, ***Video session "How I do it"***, ***Plenaries on Cancer and reconstructive surgery***, ***orthognathic surgery***, ***craniofacial deformities and exciting sessions of debates: "Controversies in oral and maxillofacial surgery"*** made it a scientific schedule of one of its kind. There were three panel discussions including the AOMSI Panel discussion discussing the various real life issues faced by maxillofacial surgeons in different parts of the country. There were ***11 international speakers*** and ***64 national speakers*** who enlightened the delegates about the current concepts and cutting edge technologies in Oral and Maxillofacial surgery. Nearly ***190 oral presentations*** and ***700 electronic posters*** offered a venue for colleagues and postgraduate trainees to present their experiences at common podium. The scientific committee had put up an unbiased methodology for evaluating abstracts for prize category papers. The Ginwalla trophy for the **Best scientific Paper of 2015** was won by **Lt Col Rohit Sharma**. The **Pre-conference courses** under the leadership of **Dr SPS Sodhi**, Pre-conference Chairman were held on 19th November at Sri Guru Ram Das Institute of Dental Sciences. The Hands on course on Maxillary sinus lift, Cancer and reconstructive surgery, Orthognathic surgery, Limited attendance courses on Navigation and endoscopic surgery and AO-Symposium on Frontal sinus and NOE Fractures added further weight to the scientific programme at 40th AOMSI.

We would like to take this opportunity to thank all the judges who have helped us in reviewing the abstracts. We sincerely hope that 40th Annual conference of AOMSI has left a significant landmark in the history of Association of Oral and maxillofacial surgeons of India. We further hope that this abstract issue will bring you a pleasant memory of the conference and will contribute to perpetuate the scientific contributions of the conference.

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Oral Presentation

Cleft and craniofacial surgery (code- CC)

CC1
Bilateral cleft lip repair by pfeifer's technique—our experience

RV Kishore Kumar

Narayana Dental College & Hospital, Nellore, Andhra Pradesh

Abstract
Cleft lip & palate are known to afflict human beings since prehistoric time. Various methods of repairs have been prosed like millard, tennison, mirault, etc. Treatment of bilateral cleft lip repair is more difficult than unilateral ones due to absence of available landmarks. Here with we are presenting a series of cases done with PFEIFER'S Technique for closure of bilateral cleft lip.

CC2
Cleft Orthognathic Surgeries -Use of Mandibular Osteotomies: Case Series

M P Ravi Kumar, David P Tauro

Vikram Hospital Private Limited, Mysore

Abstract
Secondary correction of the cleft deformities involves a comprehensive multi disciplinary approach in order to produce a satisfactory outcome. Challenges that are usually faced in this aspect involves age of patient at the time of first consultation—after the primary correction, dentition status, resultant bony deformities of the maxilla, impact of surgery on the speech, relapse / stability relationship, aesthetic outcome, nasal deformities, consideration of possible complications and the cost involved. Most protocols advise a combination of ABG initially followed by Distraction Osteogenesis and/or osteotomies of the jaws. In our scenario, most of our patients had not undergone Alveolar Bone grafting. They also had limitations of time and resources. We therefore modified our approach in rehabilitating them comprehensively. 10 cases were taken up for secondary correction over a period of 3 years. These involved tailored approaches focused on overcoming constraints and attaining good results. The approach was a combination of mandibular osteotomy as a preferred approach, along with overlay bone grafting of maxilla. Prosthodontic rehabilitation for the dentition was offered to all patients. Among 10 cases, 3 patients underwent Rhinoplasty also in order to improve the facial aesthetics. Assessment criteria of all these cases involved post rehabilitation occlusion, aesthetic outcome and stability of the surgical procedure osteotomised jaw. We would like to present the approaches and outcomes which may be more appropriate for an Indian population, as it takes into account the financial and time constraints.

CC3
Managing cranial defects

Daljinder Singh, C Senthil Kumar, A K Nandi

Command Military Dental Centre, Kolkata

Abstract
Background
Management of cranial defects remains a great challenge for our profession. These cranial defects can be genetic or acquired. Genetic defects include syndromic and non syndromic conditions which may cause craniosynostosis. Exact deformity depends upon involvement of specific cranial sutures. Acquired deformities mostly include traumatic cranial injuries, pathologic or iatrogenic (resulting from bone loss due to therapeutic craniotomy).
Objectives
Correction of neural, mechanical as well as esthetic deformities of cranium is primary objective of my presentation.
Methodology
From 2004 to 2014, ten patients with acquired cranial defects were managed along with neurosurgical cover depending on the defect or deformity and available resources at various hospitals of Armed Forces. Cranial distracters were used in two children (age< 06 Months) after osteotomy of fused sutures and gradual distraction after 05 days post-operatively resulting in new bone ion.
Results
Ten cases discussed in this presentation were managed using bone, acrylic cranial plates and titanium mesh. There was only one complication of infection of bone harvest placement which was later managed by use of acrylic cranial plate. In case of craniosynostosis, desired shape was achieved by distraction vector. A study of growth parameters is also being carried out.
Conclusion
Mechanical protection of brain and proper contour and shape of skull should to be restored for proper management of cranial defects. In case of craniosynostosis, timing of surgery is of prime concern for catching up on growth of brain apart from other factors.

CC4
Cranioplasty—A surgeon's dilemma

Rangarajan

Indian Army

Abstract
Background
The term "cranioplasty" refers to correction of bone defects or deformities in the cranium using a biocompatible material. Autogenous calvarial bone flap preserved in the abdomen, autogenous split calvarial graft or a split rib graft is the gold standard. A wide range of material has been used over the last two decades including titanium in

the form of sheet or mesh, poly-methymethaacrylate (PMMA), polyetherketone, PMMA or a hydroxyapatite based cement. Each material has different biochemical and physiological behaviour.

Objective

To choose the ideal graft/material for cranioplasty based on their properties and physiological behaviour.

Methodology

A study has been conducted over the past two year to evaluate the clinical and physiological behaviour of autogenous bone flap or graft and various other implants used for cranioplasty in this centre. The operation time, restoration of the cranial symmetry and the rate of infection are the various clinical parameters studied over the period of two years.

Results

Autogenous calvarial bone flap preserved in the abdomen, autogenous split calvarial graft or a split rib graft is the choice for the author. However in patients with large defects or in patients with other comorbities the various other implants can be used based on their physical and physiological properties.

Conclusion

The aim of this study is to clear the surgeon's dilemma in choosing an ideal graft or material for that particular patient. 3D modeling and use of custom implants has been emphasised to reduce the operative time and achieving an ideal cranial symmetry.

CC5
Clefts in twins—A double whammy!!

Samrat Sabhlok

Dr. D. Y. Patil Dental College and Hospital, Pune

Abstract

Background

Case reports and statistical data demonstrate an excess risk of oral clefts among monozygotic and dizygotic twins compared with singletons. The concordance rate was highest for monozygotic twin than among dizygotic twins with least concordance rate in ordinary siblings. Genetics of non-syndromic cleft lip and palate (NsCLP) has been investigated by various studies such as Familial and Segregational Analysis, Twin Studies, Linkage Analysis, Association studies.

Objective

This study was done to find out the incidence of occurrence of clefts in twins and to understand & explore the correlation of the multifactorial risk factors responsible for the same.

Material and Methods

A retrospective analysis was done on cleft patients operated between May 2010 to June 2015. A total of 954 cleft patients were operated during this period. Out of these, there were 3 pairs of twins which were examined.

Results

In two sets of twins only one of the siblings was affected whereas in the third set of twins both the siblings were affected. In one set of twins, one of the siblings had Downs syndrome in addition to Cleft palate whereas his sibling was completely unaffected.

Conclusion

Twins may have a greater risk for the occurrence of clefts than singletons due to various genetic and multifactorial risk factors.

CC7
Tennison- Randall Vs Millard's: Comparison between 2 techniques of unilateral cleft lip correction with a series of clinical cases

Ashish Garg

IDST

Abstract

Background

Cleft lip & palate is the most common congenital deformity of face. Overall prevalence of these deformities is 1:800 in india. Among the various techniques described for correction of unilateral cleft lip deformity Millard'S Rotation Advancement Technique of correction of UCLP had been more widely accepted as the technique is relatively simpler to perform. But there were many flaws in millards technique. To overcome the shortcomings, Tennison introduced the triangular flap technique (1952) which was further described by Randall who designed the geometry of the triangular flaps required during the procedure.

Objective

This clinical paper compares the results of Millards Rotation Advancement technique & Tennison- Randall geometrical triangular flap technique through a series of more than 10 treated cleft lip cases.

Details

Since in the Millards technique, there is no geometrical measurement of the cleft & non cleft side the operator has to progresses on his clinical observation. It might compromise the final aesthetic outcome of the surgery which requires secondary correction at the later stages. But Tennison Randall technique incorporates geometrical measurement of the flaps & considerably reduced the chances of the deformities which require secondary correction at later stages.

Conclusion

Tennison-Randall technique is preferable in cases of wide clefts over Millards technique due to its accurate measurements since triangular flaps fit into each other perfectly. There is also less notching at the vermilion border due to shortening of the philtrum which in turn requires less of secondary correction.

CC8
Long term evaluation of patients with unilateral cleft lip & alveolus who underwent pNAM

Latha P. Rao

Aster Medcity, Kochi

Abstract

Nasoalveoalr moulding has been promoted as the method which ensures nasal symmetry and alveolar & labial segment approximation before lip repair in unilateral cleft lip & palate deformity. The proposed benefits of presurgical nasoalveolar moulding are evaluated at the time of secondary alveolar bone grafting.

CC9
Role of tongue flap in closer of Large Anterior defect in case of Cleft Palate

S P Bajaj, S P Singh

Jaipur Golden Hospital, Sector 3, Rohini, Delhi

Abstract
Background
Large and wide cleft are difficult to close, when closed invariably leads to collapse of dental arches or there is break down in the anterior area leading to large fistula.
Objective
Closure of these defect and fistula is difficult as it require more tissue to cover the defect includes Nasolabial Flaps, Bucomucosal Flap or even Free Flaps for large defect. We developed mid line tongue flap based on arteries originates from two lingual artery.
Methodology
We have used these flap in 12 cases in last 3 year at our Center. Tongue flap are either right or left sided. We used mid line tongue flap. This flap can be raised up to tip of tongue and posterior up to lingual sulcus, which is water shade area between the two different blood supply.
Result & Conclusion
Mid line tongue flap is easy, simple and reliable method of closure of large defect.

CC10
Comparisons of USG guided Transverse Abdominis Plane (TAP) Block with Local Infiltration as a modality of post operative pain relief at Anterior Iliac Crest bone harvest site for Secondary alveolar bone grafting (SABG) in pediatric patients

Saumya Tripathi, Pritham Shetty, Jacob Anand, Krishnamurthy Bonanthaya, Samrat P. Tawde

Bhagwan Mahaveer Jain Hospital, Vasanth Nagar, Bangalore

Abstract
The aim of the study was to compare effectiveness of the ultrasound guided transverse abdominis plane (TAP) block in post- operative analgesia through anterior approach above infiltration of local anaesthetic agent in the anterior iliac crest bone graft harvest site for secondary alveolar bone grafting in pediatric patients. Forty patients undergoing secondary alveolar bone grafting were randomised into two groups. Local anaesthetic agent used for both the groups was 0.2 % injection Ropivacaine, 2 mg per kg body weight diluted with normal saline to get 20 ml volume. Group 1, Single dose, USG guided anterior TAP block was given at the end of the procedure. Group 2, Single bolus dose local at the operated site injected subperiosteally and in the soft tissue before closure at the end of the surgery. The primary outcome measure was postoperative pain intensity which was assessed on based on Wong-Baker FACES rating scale at rest and at function. The time to maximum pain score, time to ambulation, and duration of analgesia was recorded. Group 1 patients showed better pain relief and return to function as compared to group 2. Therefore, TAP block was found to be a more effective analgesic modality in alleviating postoperative morbidity such as persistent pain, delayed ambulation, and prolonged hospitalisation over local infiltration in iliac crest bone harvested children.

CC11
Comparative efficacy of autogenous alveolar bone grafting with autologous Platelet rich plasma and without PRP in cleft alveolus patients. A prospective randomised controlled clinical study

Kapil Waghwani, Anend Jadhav, Umesh Bhutekar, Rahul Deshmukh

Sharad Pawar Dental College

Abstract
Background
Bone grafting of the cleft maxilla before eruption of the permanent cuspid has become an accepted part of the management of patients with clefts involving the maxillary alveolus. The reasons for performing a bone graft are to stabilise the maxillary segments, provide bony support for the teeth adjacent to the cleft. PRP extracted from autogenous blood contains many growth factors, such as PDGF, VEGF and TGF-Î^2 which can accelerate bone regeneration and enhance bone ion by accompanying autogenous bone graft or bone substitutes.
Objective
The purpose of the present study was to evaluate the usefulness of PRP for autogenous bone graft in the alveolar cleft, in patients who underwent autogenous bone graft with or without PRP. In this study, we performed secondary bone grafting (mixed dentition period) in alveolar cleft patients using autologous anterior iliac crest cortico-cancellous bone with PRP and evaluated the early results.
Methodology
Total of thirty patients were evaluated, out of which 15 patients were subjected to alveolar bone grafting only (control group) and 15 patients underwent alveolar bone grafting with autologous PRP. Autologous PRP was extracted from Plasma Centrifuge machine. Chi Square test was used for statistical analysis, which revealed statistically significance ($P < 0.05$).
Results
Radiographic evaluation of the amount of graft resorption at the end of six months post-operatively. Assessment of the success of graft was made with the help of Bergland's Scoring Criteria.
Conclusion
Results of the study, suggesting that resorption is comparatively less in study group as compared to control group.

Dentoalveolar surgery (code-DS)

DS2
Comparing haemodynamic and glycemic response to local anaesthesia with epinephrine and without epinephrine in patients undergoing tooth extractions

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Abstract
Lignocaine HCl with Epinephrine as local anaesthetic provides hemostasis and decreases the risk of systemic toxicity. The purpose of the present study was to investigate and compare the response of Lignocaine HCl with and without Epinephrine to evaluate haemodynamic and metabolic response in patients undergoing tooth

extractions. The study was conducted in 50 patients comprising 25 healthy and 25 controlled diabetics undergoing multiple extractions (age group of 20–80 years). On their first visit the patients were given 2 % Lignocaine HCl with 1:200,000 Epinephrine and 2 % Lignocaine HCl was given on second visit, to carry out tooth extractions. Blood pressure, pulse rate, oxygen saturation and blood glucose estimations were done at definite intervals (before, immediately after and 20 min after administration of local anaesthetic) on both the visits. The increase in blood glucose concentration following administration of 2 % Lignocaine HCl with 1:200,000 Epinephrine was statistically significant (P value < 0.05) in controlled diabetic patients. Statistically significant variability in diastolic blood pressure was also noted in controlled diabetic patients. Both systolic and diastolic blood pressures were statistically significantly elevated after administration of 2 % Lignocaine HCl. 2 % Lignocaine HCl with 1:200,000 Epinephrine in type II diabetics and 2 % Lignocaine HCl should be used with caution in normotensive as well as type II controlled diabetic patients.

DS3

Is there a need to expose patients to the risk of thromboembolic events for procedures like simple dental extraction

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Abstract

Purpose

Discontinuation of anti-platelet therapy increases the risk of thrombotic complications whereas its continuation is believed to increase the risk of prolonged post-extraction bleeding. We therefore, performed this study to evaluate the risk of significant bleeding following dental extractions and also to assess the necessity of discontinuing anti-platelet therapy.

Patients and Methods

300 patients requiring dental extraction were included in the study in which 200 patients were on anti-platelet therapy. Patients were divided into 3 groups of 100 patients each. Group 1 consisted of patients continuing their anti-platelet therapy, Group 2 consisted of patients whose anti-platelet therapy was interrupted and Group 3 comprised of healthy patients not on anti-platelet therapy. Preoperative bleeding and clotting time were determined for all patients. The procedure involved single or multiple teeth (>3 teeth) extractions under local anesthesia with a vasoconstrictor. Pressure pack was given in all cases as in routine dental extractions and bleeding was checked after 15, 30 min, 1, 24, 48 h and 1 week. Immediate post-extraction bleeding was considered to be prolonged if it continued beyond 30 min in spite of the pressure pack. Late and very late bleeding was considered to be clinically significant if it extended beyond 12 and 24 h respectively.

Results

The mean bleeding time in group 1, 2, and 3 were 1 min and 32 s, 1 min and 25 s, and 1 min and 27 s, respectively. Prolonged immediate post-extraction bleeding (bleeding after 30 min) was present among 9 patients in Group 1 (9 %) and 15 patients in Group 2 (15 %) whereas it was not seen in any patient of Group 3. Bleeding after 1 h was present in 9 patients of group 2 (9 %) and was controlled with gelatin sponge within half an hour thereafter. None of the patients in any group reported with bleeding after 24, 48 h and 1 week.

Conclusion

Dental extractions can be safely carried out in patients on anti-platelet therapy without the risk of significant post-extraction bleeding thus averting the risk of thromboembolic events that might take place on temporary discontinuation of anti-platelet therapy.

DS4

Reduction in post-extraction waiting period for dental implant patients using Plasma Rich in Growth Factors (PRGF): An in-vivo study using Cone Beam Computed Tomography (CBCT)

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Abstract

Background

Traditionally, before dental implants, the compromised teeth are to be removed and the extraction sockets are left to heal for several months to one year. Use of PRGF allows obtaining a sufficient quantity and quality (Type-II and Type-III) of alveolar bone and ensures the initial stability of implants in a timeframe of approx. 8–12 months as described in standard Branemark Protocol.

Objectives

To evaluate the effect of PRGF in accelerating bone regeneration in fresh extraction sockets and to determine the quality and quantity of bone by assessing bone density using CBCT.

Methodology

20 patients in age group of 15–60 years, who required bilateral extractions, were selected for the study. After performing the required extractions on both sides of the jaw, the extraction sockets were filled with PRGF on one side and the other side was used as control. At 3 months follow-up, CBCT taken and the bone densities of either side were compared.

Results

In the control group, the mean bone density achieved as per CBCT was 460.8 HU, while in the PRGF group, it was 608 HU.

Conclusion

The use of PRGF accelerates the osseous regeneration of mature bone without risk of infection or disease transmission. It significantly shortens the waiting time for future implant placements.

DS5

Single blind study using blue light emitting diode on bleeding extraction socket—A pilot study

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Abstract

Chromo therapy is a method of treatment that uses the visible spectrum of electromagnetic radiation to cure diseases. Avicenna (A.D) reported the art of healing tissues using colours. Photo therapy uses focalisation of light on particular area or unit for effective healing of wounds, to control bleeding and even headaches. Esoteric medicine that focuses on the mind and body continuum has expounded the importance of using chromo therapy in establishing the balance of

energy centres (chakras) and the physical body using different wavelengths of light. This however was not fully accepted by modern science due to its ubiquitous nature of study design and evaluation. Most recently it is used in our field of oral and maxillofacial surgery for photocoagulation therapy in wound healing with visible light. Establishing early hemostasis and ensuring a sterile blood clot is a sine qua non for a dental extraction wound. Many methods / aids are used to establish hemostasis and ensure a stable blood clot. Recently, the method adopted was using visible light of 490 nm (Blue light spectrum). This study attempts to validate the claims through a Randomized Clinical Trial of dental extraction socket bleeding in patients undergoing therapeutic extraction for orthodontic treatment.

DS6
Early accelerated tissue healing using adult blood derived stem cells in minor oral surgery

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Abstract
Tissue regeneration is the biggest goal of rehabilitation therapies today, for which many products and techniques have been used (Tissucol, PRP, PDGF, PRF etc). Though none of the systems proved to be successful for an appropriate bio stimulation, as these techniques do not exploit the regenerative potential of the components of the whole blood. The concentrated growth factor technique envisages the use of all the separated blood phases which can be disposed individually in order to obtain the bio stimulation of related cells or tissues. The Concentrated Growth Factor as a regenerative tool for accelerated wound healing was developed by Sacco in 2006, taking advantage of presence of adult stem cells and growth factors when whole blood is processed in a specific cycle. This presentation is about the role of CGF in early accelerated tissue healing in minor oral surgical procedures of a health individual.

DS 7
Role of Serratiopeptidase in the post operative pain and swelling after 3rd molar surgery

Sameer Kaura, Sumit Bansal, Japsimran Singh

B J S Dental College and Hospital

Abstract
Background
A comparative study was done for 50 patients undergoing third molar surgeries to evaluate the efficacy of post operative pain and swelling.
Methodology
50 young and healthy patients with bilateral impacted mandibular third molars were selected for the study. serratiopeptidase was advised along with other analgesic in one group only.
Result
No significant difference was noticed with the use of serratiopeptidase on patients pain and swelling.

DS 8
Study of effect of Povidone Iodine as hemostyptic in routine dental extraction

Kanwaldeep Singh Soodan

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Abstract
Background & Objectives
To evaluate effect of Polyvinylpyrrolidoneiodine (PVPI) 2 % as hemostyptic when used as an irrigant in low concentration during surgical procedure.
Methods
100 healthy patients who needed routine dental extraction were selected. Patients were divided into 2 groups ($n = 50$), the treatment and control groups. The alveolar sockets of treatment group patients were irrigated using PVPI (2 %, w/v) following routine dental extraction whereas those of control group were irrigated using normal saline (sodium chloride 0.9 %, w/v). Spontaneous stoppage of bleeding from socket following irrigation was considered as significant haemostasis before compressing socket to reduce the linear micro fractures until observation were made.
Results
T test was applied for age and was found that both groups were matched for age ($p > 0.05$ %). Average bleeding control time (in seconds) in Betadine group was found out to be 135.72 ± 11.348 and in saline group was 168.78 ± 23.661. By applying t test, p value was found out to be highly significant.

DS 9
Effect of Dexamethasone on postoperative pain, swelling and trismus following surgical removal of impacted mandibular third molar

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Abstract
Background & Objectives
To evaluate effect of Dexamethasone on postoperative pain, swelling and trismus following removal of impacted mandibular third molar.
Methods
The study included 20 patients with bilateral impacted mandibular third molars. The patients were randomized to receive dexamethasone sodium phosphate injection 8 mg (2 ml) into deltoid muscle 1 h preoperatively in the first or second surgical extraction. Clinical examination to assess the postoperative sequelae of pain, swelling and trismus was carried out preoperatively, immediate postoperatively and on the postoperative day 2 and day 7.
Results
The results of the present study revealed that in the absence of contraindications to corticosteroid use, 1 h preoperative administration of 8 mg dexamethasone in the deltoid muscle produces significant reduction in the postoperative pain, swelling and trismus.

Head and Neck Oncology (code-HN)

HN2
Versatility of submental artery island flap in tongue reconstruction and functional rehabilitation: Experience and review of literature

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Abstract

Introduction

Submental artery island flap is a well described, time tested, versatile and reliable flap for selected moderate sized defects after ablative surgery of head and neck region. Careful and precise pedicle dissection ensures oncologic safety while dealing with oral cancers with no nodal status. We would like to share our experience and surgical technique of this flap in reconstruction and functional rehabilitation of glossectomy defects following oncologic resection.

Material and methods

We would like to present our experience with submental artery island flap in reconstruction of tongue defects along with a critical review of literature on its feasibility, oncologic safety, tongue protrusion and its effect on speech and swallowing following reconstruction with this flap.

Conclusion

This flap has a long, reliable and sturdy pedicle, which provides a simple, safe cutaneous paddle from a hidden donor site that is closed directly. It offers a simple reconstruction, but its use following excision of malignancy requires careful consideration. The main concern is that potentially involved nodes may be left in the flap or its pedicle. Although the flap tends to affect speech and tongue protrusion minimally we conclude that it is a rapid and effective alternative to the radial forearm flap for tongue reconstruction and a valuable to the existing surgical armamentarium.

HN3
Importance of sentinel lymph nodes & management of metastatic cervical lymph nodes in unknown primary in head & neck cancer

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Abstract

Squamous cell carcinoma (SCC) of the oral cavity represents about 2 % of all malignant neoplasms and 47 % of those developing in the head and neck area. Prognosis depends on the stage: mortality ranges from 10 % in stage I to 70 % in stage IV. The sentinel lymph node (SLN) is defined as the lymph node on the direct drainage pathway from the primary tumor. Sentinel lymph node biopsy (SLNB) is a minimally invasive technique and can be used for staging of cN0 neck in early OSCC. Cervical lymph node metastases from unknown primary (CUP) origin constitute about 5 % (range, 2 %9 %) of all head and neck cancers. Metastases of SCC from unknown primary origin to cervical lymph nodes represent 2 % to 7 % of head and neck cancers. There is poor consensus on the extent of diagnostic and pathologic evaluations required for these enigmatic cases which still lack effective treatment. This paper provides the state of the art about clinical and therapeutic management of this malignant syndrome; main interest is addressed to the most recent improvements in CUP molecular biology, diagnosis and pathology, which will lead to successful tailored therapeutic options.

HN4
Superficial temporal fascia interpositioning for prevention of Frey's syndrome post parotidectomy: A retrospective study

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Abstract

Background

Freys syndrome (FS) is a commonly documented inevitable postoperative complication following parotidectomy. This is the first study on the use of superficial temporal fascia (STF) for the prevention of FS post superficial parotidectomy (SP) in existing literature.

Aim & Objective

The aim of this study was to clinically evaluate the efficacy of STF as interpositioning barrier between the overlying skin flap and the parotid bed for prevention of FS following SP.

Methodology

A retrospective study was designed involving a population of patients from a single institution who underwent SP for parotid tumors and refractory chronic sialadenitis by a single surgeon from 2008 to 2011. 48 cases were identified and divided into two groups: group I ($n = 25$) had undergone STF interpositioning between the skin flap and the parotid bed after extending the modified Blairs incision in the temporal region, and group II ($n = 23$) had undergone SP using the modified Blairs incision without any interpositioning.

Results

In group I, one of 25 cases (4 %) developed mild FS; in group II, nine of 23 cases (39.1 %, $x^2 = 9.28$; df = 1; *P*-value = 0.0023) developed FS of varying severity. There were no cases of permanent facial palsy in either group. Alopecia along the temporal extension of the incision line was imperceptible in all group I cases.

Conclusion

The use of an STF interpositioning barrier between the overlying skin flap and the parotid bed is a safe and effective procedure for the prevention of FS following SP.

HN5
Radiotherapy—A redemption for head and neck alignancies

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Bapuji Dental College & Hospital

Abstract

The use of radiotherapy (RT) is a proven therapeutic modality for treatment and palliation of head and neck malignancy. The theory behind its use is that therapeutic radiotherapy targets neoplastic cells because of their innate higher level of cellular turnover. For locoregionally advanced disease, RT is often used as adjuvant after

surgery or (in combination with chemotherapy) either before surgery or as definitive organ preserving treatment. For many tumor sites, RT yields better functional outcomes than surgery. Most head and neck cancers are treated with external beam RT. The most commonly used forms of ionizing radiation are high-energy photons and electrons, produced by linear accelerators. The techniques for planning and delivery of external beam RT have advanced dramatically corresponding to the availability of 3D CT images of the tumor. This has allowed directed irradiation and the development of intensity-modulated radiation therapy (IMRT). IMRT is a technique that delivers a homogenous dose of radiation focused at the target site, but consists of a spatially non-uniform radiation exposure from various points of reference that minimizes radiation exposure to healthy tissue. The concept of a more conformal radiation dose ensuring the tumor and draining lymph nodes are adequately treated with less tissue damage and subsequently less morbidity and improved quality of life makes IMRT the preferred modality for the treatment of most head and neck cancers. The aim of this paper is to review the literature and provide guidelines for the indications, dosage and the best modality of radiotherapy for treatment of head and neck malignancies.

HN6
Role of P53 in diagnosis and postoperative early detection of recurrences in oral leukoplakic patients

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Sudha Rustagi College of Dental Sciences & Research, Faridabad, Haryana

Abstract

Background & Objective

Leukoplakia ranges microscopically from benign hyperkeratosis to invasive squamous cell carcinoma. Alteration in tumour suppressor gene p53 may serve as prognostic biomarker. Therefore, the aim of this study is to evaluate the role of p53 immunohistochemical analysis in diagnosis and detection of early recurrences in leukoplakic Patients.

Material & methods

Study was conducted in the Department of Oral & Maxillofacial Surgery & Department of Oral Pathology in Sudha Rustagi College of Dental Sciences & Research, Faridabad, Haryana. We studied 30 samples of clinically proven leukoplakia patients in whom surgical excision was performed and tissue sample sent for p53 immunohistochemical analysis and histopathological examination. Punch biopsy was also done at 6 months and 1-year interval postoperatively to detect the recurrences following both the diagnostic criteria. Data analysed with SPSS version-11 using Chi Square test ($p < 0.05$).

Results

At diagnostic level, no statistically significant difference was seen amongst both the diagnostic aids with strong correlation between the two. At 6 months interval, mild dysplastic changes could be seen only in 10 % patients whereas 36.7 % patients presented with higher p53 grading score & 2 patients presented with recurrence at 1 year interval who had higher p53 grading score at 6 months interval as well.

Conclusion

P53 analysis may be closely correlated to dysplastic changes at diagnostic level but supersedes histopathological examination in detection of recurrences 6 months and 1 year postoperatively.

HN7
Primary intraosseous carcinoma of jaw—A diagnostic dilemma

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Abstract

Primary intraosseous carcinoma (PIOC) is a relatively uncommon group of malignant tumors. The definite diagnosis of PIOC is often difficult as the lesion must be distinguished from alveolar carcinoma that may invade the bone from the overlying soft tissues or from the tumors that may have metastasized to the jaw from a distant site and from the tumors of maxillary sinus origin. Since the most common symptom of PIOC is swelling and persistent pain in mandible, the diagnosis becomes difficult, and an infectious etiology is commonly considered. Furthermore as the diagnostic criteria of PIOC are obscure, the cases which have been reported as PIOC in the English literature are very few. The author presents a case report with the review of the literature and also tries to solve the dilemma in the diagnosis of PIOC.

HN 8
Evaluation of relationship between ABO blood group and Oral Cancer

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Abstract

Background

Oral cancer has a significant place in the epidemiology of malignant diseases Oral cancer has multifactorial etiology and is significantly associated with risk factors of the individual's lifestyle, particularly, chronic use of tobacco, spicy food, alcohol and smoking. Many studies have indicated that genetic factors also have an influence on the etiology of cancer. Other possible factors in the development of oral cancer such as viral infections and different expression of ABO blood group antigens are also being studied.

Aim

To evaluate if any of the ABO blood groups are associated with an increased risk for oral Cancer.

Methodology

The present study was conducted at Department of Oral and Maxillofacial surgery in Sharad Pawar Dental College, Sawangi (Meghe), Wardha, after obtaining Institutional Ethical committee clearance. The study sample comprised 300 oral cancer patients and 600 controls. For statistical analysis, Chi-square test and odds ratio were used to assess the relationship between ABO blood groups and oral cancer. Probability level was fixed at 0.05.

Results

It was found that people with blood group A had 1.46 times higher risk of developing oral cancer compared to people of other blood groups.

Conclusion

By employing a simple blood grouping test during community field programs, people with blood group A in the age group of 40–60 years

having tobacco chewing habits can be apprised that they are more at risk to develop oral cancer than people with other blood groups.
Keywords: ABO blood group, oral cancer, oral cancer risk.

HN 9

Modified surgical protocol for oral submucous fibrosis-coronoidectomy or coronoidotomy a quandary in surgical treatment of oral submucous fibrosis —a mystery solved

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Dr HSRSM Dental College Hingoli

Abstract

Introduction

Oral submucous fibrosis is chronic debilitating disease characterized by gradually increasing fibrosis of the oral cavity and pharynx, mainly the buccal mucosa, resulting in trismus. Surgical treatment is indicated for advanced & irreversible stage. The procedure consists of release of fibrous bands followed by resurfacing the raw areas with skin grafts, fresh amnion, collagen or local flaps but on long term follow-up recurrence & relapse is inevitable. In most of these procedure either connective tissue is use to cover defect which itself has inherent property of contracture & fibrosis or other modalities which includes intraoral epithelial flap which are invariably affected which means we are merely transferring pathologic tissue from one anatomic location to other so fibrotomy Masticatory muscle myotomy, coronoidectomy & reconstruction with nasolabial flap has given promising results. We have evaluated long term outcome of same surgical differing in coronoidectomy or coronoidotomy.

Material & methods

100 patient reported to Dept of OMFS, Apex superspeciality hospital Aurangabad were divided into two groups & treated by same surgical protocol differing in coronoidectomy or coronoidotomy evaluated periodically for maximum inter incisal opening, operating time & burning sensation data collected and analyzed.

Results

Long term outcome of current study shows that fibrotomy, Masticatory muscle myotomy, & reconstruction with nasolabial flap has given promising results. But coronoidectomy or coronoidotomy doesn't play a significant role in outcome. So coronoidotomy instead of coronoidectomy can be an alternative option in standard surgical protocol in OSMF which significantly reduces operating time with lesser complications.

HN10

Functional and Oncologic outcomes in patients undergoing total glossectomy

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Abstract

Objectives

Total Glossectomy is considered as a morbid treatment for a morbid disease. The objective of our study was to evaluate the functional and oncologic outcomes in patients undergoing total Glossectomy for advanced squamous cell carcinoma of the tongue.

Methodology

This is a prospective study designed to study the functional and oncologic outcomes in patients who have undergone total Glossectomy. There are 25 patients in our series from 2012 onwards. All patients who underwent total Glossectomy and reconstruction with microsurgical or regional flap were included in the study. The functional outcome analysed was the ability to restart an oral diet and decannulation. The minimum time frame at which functional outcome was analysed was at 6 months after surgery. The oncologic outcome analysed was in terms of local disease control and overall survival. The oncologic outcome is to be analysed at 1 year after completion of surgery.

Results

Our study group comprises 25 patients, 19 male patients and 6 female patients. The mean age of the patient was 49.5 years. All patients had biopsy proven squamous cell carcinoma of the tongue. The most commonly used flap for the design of the neotongue in our series is the anterolateral thigh flap ($n = 23$) followed by the pectoralis major myocutaneous flap ($n = 2$). All patients had intraoperative tracheostomy tube and percutaneous endoscopic gastrostomy tube placement. 20 patients were advised postoperative adjuvant treatment. 3 patients died before completion of treatment due to unrelated causes. At a median follow up of 11 months, 1 patient has developed regional recurrence and 1 patient has developed distant metastasis. 86 % of patients in our study group are disease free. There have been no flap related complications. The mean time to decannulation in our study group was 2.6 months. All patients were able to resume a soft, pureed diet by a mean time period of 3.1 months. From 22 patients, 21 patients could be decannulated (95 %), however one patient had persistent aspiration necessitating tracheostomy continuation.

Conclusion

This study has analysed the functional outcome of total Glossectomy. Our results indicate a reasonable functional outcome with most patients being decannulated and able to start an oral intake. Appropriate reconstruction to provide adequate oral volume and laryngeal elevation enables early functional recovery with decannulation, intelligible speech and return to an oral diet. The long term oncologic outcome needs further follow up.

HN11

Shoulder Function After Selective and Superselective Neck Dissections

Ashish Sharma

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Abstract

Background & objective

Super-selective neck dissections are currently advocated for oral cavity malignancy with No neck where level IIB nodes are spared. Sparing of IIB nodes is advised because of minimal involvement in oral cavity malignancy for No neck and secondary for reducing of shoulder morbidities as SAN is spared. Thus we conducted a study to compare shoulder morbidity and rate of recurrence using classical SOND and super-selective neck dissection for oral cavity malignancy in No neck.

Methodology
The prospective study conducted involved 20 patients, primarily of oral malignant neoplasia with clinically staged No neck. Selective neck dissection (I–IIA–IIB–III) was performed in 10 cases (group A) and a super-selective neck dissection (I–IIA–III) in 10 cases (group B). All patients underwent clinical examination objectively for shoulder function in particular for arm abduction, 3 days after surgery (T1), 8 days after surgery (T2) and 21 days after surgery (T3), 45 days after surgery (T4), 90 days after surgery (T5), 120 days after surgery (T6) and 180 days after surgery (T7). Subjective assessment was done using quality of life questionnaire post-operatively at 1 month. All patients were simultaneously observed for recurrence in follow-up visits.
Results & conclusion
Our data suggests that rate of recurrence remains same for both techniques while significant reduction in shoulder morbidity was seen using super-selective neck dissection technique.

HN 12
Relevance of tumour thickness in carcinoma tongue and practical methods of assessment

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Amrita School of Dentistry, Kochi, Kerala

Abstract
Background
Squamous cell carcinoma (SCC) of tongue is characterized by a high potential for local invasiveness and a great propensity for metastases to cervical lymph nodes. In patients with node-negative (N0) carcinoma tongue, the risk of occult cervical lymph node metastases is highly variable. Research into the possible predictors of occult metastasis has shown a strong correlation between histological tumour thickness and the risk of nodal metastasis.
Objective
To compare different techniques of pre-operative and intra-operative measurement of tumour thickness, and to determine a practical and reliable method for routine use.
Methodology
A prospective study was carried out on 29 patients with early carcinoma tongue and N0 neck, who underwent glossectomy. The tumour thickness was measured macroscopically, by ultrasonography, using MRI and microscopically. The results were then compared, keeping the microscopic measurement as the gold standard. The correlation of other clinicopathological factors with neck metastases was also analysed.
Results
All three methods macroscopic, ultrasonography and MRI showed strong correlation with the microscopic value. The macroscopic method showed the best agreement. A tumour thickness of 4 mm or above was found to be a strong predictor of lymph node metastasis.
Conclusion
Direct macroscopic measurement of the glossectomy specimen is a reliable and cost effective technique to measure the tumor thickness intraoperatively, which will help the surgeon to decide on the need for neck dissection in early tongue carcinomas with N0 neck.

HN 13
Is Comprehensive care possible for an Oral Cancer patient in a Dental College setting?? Exploring possible solutions

Rinku George

Saveetha Dental College

Abstract
Background
Management of an Oral cancer patient is multidisciplinary with involvement of a plethora of disciplines for optimal treatment and rehabilitation of these patients. Most of these disciplines are either from the medical community or from allied specialties. These results in a huge logistical problem due to the multiple specialties involved with patient being referred to different centers for adequately addressing the issues that plague cancer patients. Again the multiple specialties involved incur much expense for the patients most of whom are from the lower socioeconomic group.
Objective
This presentation hopes to introduce a new concept wherein which how it is possible to give a multidisciplinary care for an Oral cancer patient with the existing resources of a Dental College.
Methodology
Post graduate departments like Maxillofacial Surgery, Oral medicine, Oral pathology, Community dentistry, prosthodontics, Periodontics and Conservative dentistry can play integral role in Oral Cancer care. Each department is entrusted with specific roles in the comprehensive management of the cancer patient. Currently the only medical specialists required additionally are Radiation and Medical Oncologists.
Conclusion
Resources constraints in Dental institutions make Comprehensive care for cancer patients a challenge. In our experience this system works well with oral cancer patients as they are given multimodality support in the same campus itself thereby reducing the logistical issues involved for the patient considerably. This system can be brought up in our country which also has one of the largest numbers of oral cancer patients in the world.

HN 14
Role of Immunohistochemistry in diagnosing rare tumours of the Jaws

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Sri Guru Ram Das Institute of Dental Sciences and Research

Abstract
Immunohistochemistry (IHC) is an important of monoclonal as well as polyclonal antibodies to determine the tissue distribution of an antigen of interest in health and disease. IHC uses specific tumour markers to diagnose benign and malignant tumours of the jaws, to determine the stage and grade of the tumour(s), identify the cell type and origin of a metastasis to find site of primary tumour. This paper reviews the utility of molecular markers in diagnostic dilemmas, prognosis and treatment planning of some uncommon lesions of the jaws.

HN 15
IHC as a gold standard tool in histopathologically non-diagnosed cases

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Sri Guru Ram Das Institute of Dental Sciences & Research

Abstract
Background
Parotid gland is sometimes associated with some rare and unusual tumors which cannot be diagnosed on routine investigations. Moreover histopathological patterns can overlap in different tumors leading to diagnostic dilemmas. Immunohistochemistry becomes the major tool for final diagnosis in such cases.
Objective
To document 3 rare and unusual variants of parotid gland tumors diagnosed on IHC.
Methodology
IHC was employed in cases non-classified on clinical, radiological, FNAC and histopathology. The detailed cases will be presented and current modalities for diagnosis and treatment will be discussed.

HN17
Sarcomas of head and neck region- our experience

Hari Ram

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Abstract
Background
Sarcomas of head and neck region are very rare. Sarcomas of head and neck region involve soft tissue most commonly and the sarcomas of hard tissue are very rare, comprising only 20 %. Rhabdomyosarcomas are the most common histological types seen in the head and neck region. Treatment of sarcoma of Head and neck depends upon tumor size, site, histological type, stage, and age of patient.
Methodology
The present study was conducted in patients with primary sarcomas of the head and neck region attending outpatient department and indoor patient department of Oral and Maxillofacial Surgery, between 2008–2015. We studied the following variables: age, gender, race, origin, primary anatomical location of the neoplasm, pathology diagnosis, type of treatment employed.
Objectives and results
We found 31 patients with head and neck sarcomas; five of them were taken out because they had incomplete charts; thus the final sample had 25 patients. Of this sample, 22 (70.9 %) were males, and 9 (29.03 %) were females, The man/woman ratio was 2.4:1.
Discussion
In the study, there was a higher prevalence in men, with a statistically significant difference, agreeing with other studies. Bentz et al. [19] found very similar prevalence between the genders; and Bree et al. [1] found a higher frequency among females.
Conclusions
Rhabdomyosarcoma was the most predominant histological type seen in the study. The most commonly involved sites were the face and the neck. Most of the patients were live without evidence of disease in the last visit.

HN18
Unconventional reconstruction in head and neck region using conventional flaps

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Abstract
Deformities of the head and neck region can have devastating effects on appearance and function of the patient and are among the most disabling and socially isolating defects with significant impact on patients quality of life. Reconstruction of such defects continues to be an extremely demanding challenge for surgeons who aim to restore form and function with minimal surgical morbidity. Use of regional flaps have long been propagated as one of the best reconstruction options for head and neck defects. However, these conventional flaps have not been used to the best of their ability, due to limited indications mentioned in literature. We present a number of cases with unconventional reconstructions using these conventional regional flaps. This presentation aims to open a new horizon for the reconstruction indications of these flaps with minimum morbidity to the patient and no additional burden on the surgeon.

HN 19
Is Oral Squamous Cell Carcinoma (OSCC) in the background of Oral Submucous Fibrosis (OSMF) biologically distinct subgroup? A Correlation of depth of tumour invasion and pattern of cervical metastasis in OSCC associated with OSMF

Umesh Bhutekar, Nitin Bhola, Anendd Jadhav, Rahul Deshmukh, Kapil Waghwani

Sharad Pawar Dental College

Abstract
Background
There has been an increased incidence of concomitant association of Oral Squamous Cell Carcinoma (OSCC) & Oral Submucous Fibrosis (OSMF) in recent times. In these patients, dense fibrosis and less vascularity of the corium, in the presence of an altered cytokine activity creates a unique environment for carcinogens from both tobacco and areca nut. Less vascularity may deny the quick absorption of carcinogens into the systemic circulation and this reduced and blocked submucosal vascularity may have a beneficial effect on overall prognosis.
Objectives
Considering the fibrotic environment of OSMF and the lesion (OSCC) occurring in this situation, we attempted to evaluate the depth of tumour invasion and the pattern of lymphatic spread in OSCC co-existing with OSMF.
Methodology
We prospectively evaluated 40 patients of OSCC with OSMF. All clinicopathologic findings were recorded and patients underwent standard management. Resected lymph nodes were subjected to frozen section, Conventional H & E staining, Step serial sectioning and Immunohistochemistry. Depth of tumour invasion was measured histopathologically by Ocular Micrometer.

Results
OSCC with OSMF affects younger population showing better grade of tumour differentiation, predominantly involving buccal mucosa and GB sulcus with lesser depth of tumour invasion, superficial and more predictable nodal metastases, most commonly involving level Ib lymph nodes. Depth of tumor invasion was statistically significant with cervical lymph node metastasis.
Conclusion
The findings of the study may act as a guide line to formulate a strategy for management of OSCC with OSMF which could be more conservative compared to the established protocols.

HN20

Is excision of tail of parotid nodes as a part of standard surgical management protocol essential in loco regional control of oral squamous cell carcinoma?

Anendd Jadhav, Nitin Bhola, Rahul Deshmukh, Umesh Bhutekar

Sharad Pawar Dental College

Abstract
Background
The tail of parotid node is an uncommon site of metastasis in OSCC. The necessity of excise this during neck dissections for intra oral primary SCC is not clear from the literature.
Objective
This retrospective study was intended to clarify the incidence and indicators of OSCC metastases to the inferior parotid node.
Methodology
The records of 954 patients with OSCC who had undergone excision of primary with neck dissection between June 2007 and July 2012 were reviewed. In all cases, the tail of the parotid (TOP) below the marginal mandibular branch of the facial nerve was resected. The cervical and parotid lymph nodes were subjected to frozen section analyses, histopathological evaluation, step serial sectioning followed by IHC. All patients had a minimum follow up of 3 years or until deceased, with a mean duration of 1.2 years.
Results
The total neck dissections performed were 1002. We performed 570 SOHND, 432 MRND, 19 bilateral neck dissection. Of 954 patients, 14 (1.45 %) had TOP metastasis. 7 among them were extraglandular nodes and 36 were intraglandular nodes. Histopathologically, poorer degree of OSCC differentiation and number of positive cervical nodes were associated with TOP metastasis. Buccal mucosa, followed by lower GB sulcus and the lateral border of tongue were the most frequently associated with TOP metastasis.
Conclusions
The likelihood of metastasis to the TOP increased with poorer differentiation and the number of positive cervical nodes. Buccal mucosa was the most commonly associated subsite. Metastasis to the parotid nodes although rare (1.45 %), it should be considered in patients with OSCC to prevent dismal outcomes.

HN21

Are Oral Squamous cell carcinomas in Non Tobacco and Non Alcohol Abusers a clinic-pathologically distinct aggressive entity?

Rahul Deshmukh, Anendd Jadhav, Umesh Bhutekar, Kapil Waghwani

Sharad Pawar Dental College

Abstract
Background
The attributed risk factors for the vast majority of patients with OSCC are smoking and alcohol abuse; however, there appears to be a rising proportion of OSCC patients who report no smoking or drinking history.
Objective
To recognize specific clinic-pathological characteristics of OSCC arising in never-smoking and drinking (NSND) patients.
Methodology
Demographic data, clinical characteristics, and potential etiologic factors for 68 NSND patients were retrospectively reviewed from July 2002 to September 2010 of HPV negative previously untreated OSCC. All patients underwent surgical excision of the primary along with neck dissection followed by adjuvant radiotherapy. Each paraffin embedded node was assessed by frozen section analysis, convention histopathological evaluation, step serial sectioning followed by Immunohistochemistry (IHC). Patients were followed upto 5 yrs postoperatively or till deceased.
Results
There was a distinct predilection for females in 4th to 6th decade of life. NSND patients had a higher proportion of tongue and floor of mouth malignancies. In majority of the cases the tumor were found to be moderately differentiated with highest number of cervical metastasis found in level Ib group of lymph node followed by level III. The 5 year disease free survival was found to be 64 %.
Conclusion
OSCC in NSND shows a unique aggressive clinic pathological p.

HN22

Malignant Transformation of Chronic Osteomyelitis: A Case Report

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Karpaga Vinayaga Institute of Dental Sciences

Abstract
Osteomyelitis is primarily an inflammation of medullary portion of the bone. It can be considered as an inflammatory condition of the bone that begins as an infection of the medullary cavity, rapidly involves the Haversian system and quickly extends to the periosteum. Neoplasia occurring in a sinus tract is a well known complication of chronic osteomyelitis. Malignant transformation as a result of chronic osteomyelitis represents a relatively rare and late complication with a declining incidence in the modern world. For most patients, the interval

between the occurrence of the original bacterial infection and the transformation to malignant degeneration is several years. The diagnosis of malignant transformation in a chronic discharging sinus requires a high index of clinical suspicion. Wound biopsies should be obtained early, especially with the onset of new clinical signs such as increased pain, a foul smell, and changes in wound drainage. Squamous cell carcinoma is the most common presenting malignancy. Definitive treatment is wide local excision, combined with adjuvant chemotherapy and radiation therapy in selected patients. Most effective treatment is prevention with definitive treatment of the osteomyelitis, including adequate debridement, wide excision of the affected area, and early reconstruction.

Implantalogy (code-I)

I1
Dental Implants: Is Rarely A Minor Oral Surgical Procedure

Deepak Gupta

SBB Dental College, Ghaziabad

Background
In today's world of modern dentistry dental implants plays an important role.
Objective
Although dental implant is not a new procedure in dentistry, but due to increase in general awareness, more & more patient want aesthetic and functional replacement of natural teeth.
Methodology
We as a maxillofacial surgeon consider it as an another minor oral surgical procedure.
Results
This procedure involve lots of economic boost for the clinician, but also at the same time requires fine surgical/clinical skills to perform the same.
Conclusion
I would like to present and preview my aspect regarding dental implant practice.

I2
Success After Implant Failure: Boon To Maxillofacial Sturgeons

Anurag Yadav, M. N. Ravishankar

Sardar Patel Postgraduate Institute of Dental and Medical Sciences

Abstract
Background
Implant failed to osteo-integrate with bone poses complications like loss of alveolar bone, loss of time, questionable surgical skill and economic factor
Objective
Replacement of Implant can be done in such cases by maxillofacial surgeons easily. Two techniques have been used in implant failure cases successfully.
Methodology
In 1st technique drilling and cleaning was done upto previous implant diameter followed by placement of implant 1 diameter larger with requirement of bone graft in cases where buccal cortex was resorbed. In second technique failed Implant in anterior maxilla and mandible were selected and single hole titanium plate were used after cutting. Titanium plate hole was inserted at the apex of the Implant after making horizontal cut on buccal bone. Implant was inserted and apex of the Implant was tightened in plate. Tightening done until resistance was felt and it starts moving. Hydroxyapatite graft was placed as required and flap was closed. Implant was allowed to osteo-integrate and this type of fixation of Implant is permanent fixation without fear of failure of osteo integration.
Results
All patients treated by this technique had successful osteointigration. Complications like buccal cortex fracture maybe a possibility in this technique.
Conclusion
Adequate knowledge of anatomy, physiology and acquaintance with plating system has given maxillofacial surgeons an upper hand over other specialties in Implantology technique. We as maxillofacial surgeon can utilise their skills and techniques to prove it.

I3
Basal Osseo Integrated Implants-Surgical Concepts and its Use In Compromised Bone

Dayashankara Rao Jk, Akshay Bharghv, Simran Pal Kaur

Faculty of Dental Science SGT University

Abstract
"Basal Osseo integrated implants" synonymously known as lateral implants or disk implants, refers to the implants using the principle of utilizing basal bone areas. With a disk diameter of 7 mm or more, they are inserted through a T shaped slot from the lateral aspect of the jaw bone reducing patient discomfort Basal implants are beneficial in many ways. First of all they provide immediate prosthetic rehabilitation, because they take support from the cortical plates of basal bone rather than atrophied crest of alveolar bone. In the case of atrophied mandible, basal implants can be placed transversely above the mandibular canal taking the horizontal bone support or bicortical implants can be placed by bypassing the mandibular nerve, engaging the lower cortical border of the mandible. In this study, we will assess the success of immediately loaded basal implants in maxillary and mandibular arches.
Aim
To assess the success basal implants in resorbed mandibular and maxillary ridges.
Objectives
1. To evaluate clinically the stability of basal implants. 2. To assess the osseointegration and crestal bone level around basal implants after loading. 3. To evaluate the gingival health around immediately loaded basal implants.

I4
Segmental Ridge-Split Technique—An approach to implant rehabilitation of an atrophic ridge

Deepti Vashisht Prashar

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Abstract
Insufficient alveolar bone thickness presents a unique challenge for the successful implant rehabilitation of the edentulous site. To

overcome this hindrance, several surgical techniques have been mentioned in the literature such as ridge augmentation, Guided bone regeneration but they present several drawbacks such as invasiveness, additional donor site, resorption of grafting materials, implant installation delay and membrane collapse and exposure to infection. When the alveolar ridge is narrower than the optimally planned implant diameter, the segmental ridge-split procedure provides a quicker method wherein an atrophic ridge can be predictably expanded and implant be seated simultaneously.

I6
Bone Augmentation for Implants: 'A perio-esthetic approach'

Aishwarya Nair

D. Y. Patil School of Dentistry

Abstract
Dental implants have become a reliable and predictable treatment alternative for the replacement of missing teeth with conventional removable and fixed partial dentures. Often, soft and hard tissue defects result from variety of causes such as periodontal infection, trauma, and tooth loss. In the pursuit for improved esthetics, the literature has dedicated a considerable amount of research on the successful maintenance and regeneration of the surrounding gingiva and bone. In addition, many types of biocompatible materials and different surgical techniques have been developed. This has resulted in greater understanding of the dynamics and anatomical and biological concepts of the periodontium and peri-implant tissues both at the surgical and prosthetic phases of treatment, which contributes to better soft and hard tissue management. A superior esthetic outcome is achieved by having a harmonious soft tissue profile, a correctly placed and contoured final restoration and the re-establishment of masticatory function and phonetics. The aim of this paper is to evaluate the different surgical techniques available to provide a favourable foundation for ideal implant placement and the survival/success rates of implants placed in the augmented areas.

Maxillofacial Pathology (code- MP)

MP1
Variants of Ossifying Fibroma – our experience

Sarwar Ghulam Hashmi

AMU, Aligarh

Abstract
The concept of Fibro-osseous lesion of bone evolved over the last several decades to include two major entities: Fibrous Dysplasia and Ossifying Fibroma as well as the other less common lesions such as Florid Osseous Dysplasia, Periapical Dysplasia, Focal Sclerosing Osteomyelitis, Proliferative Periostitis of Garrie and Ostitis Deformans. Ossifying fibroma is considered by a benign neoplasm arising from undifferentiated cells of the periodontal ligaments tissues. In 1872, Menzel gave the first description of a variant of Ossifying fibroma called Cemento-ossifying fibroma in a 35 years old woman with a long standing large tumor of the mandible. The Cemento-ossifying Fibroma is a central neoplasm of bone as well as periodontium which has caused considerable controversy because of confusion of terminology and criteria of diagnosis. Juvenile aggressive ossifying fibroma is a rare benign, potentially aggressive lesion with a high recurrence rate. It is usually diagnosed early in life based on its aggressive clinical behaviour. Because of its high recurrence rate complete excision is essential. This paper describes the variants of ossifying fibroma and our institutional experiences regarding the management of above variants.

MP2
Comparison of efficacy of buccal fat pad & collagen membrane in surgical management of oral submucous fibrosis

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Abstract
Background
Oral submucous fibrosis is a chronic progressive premalignant condition, characterized by gradually increasing fibrosis of sub mucosa of cheek resulting in trismus thereby limiting mouth opening. Various surgical modalities have been tried in surgical management, but each has its own limitations. Buccal fat pad and collagen membrane has seen satisfactory results. In this study these two grafting materials have been compared and assessed their roles in improving the mouth opening post operatively.
Objective
To compare the Efficacy of Buccal Fat Pad (BFP) & Collagen Membrane as an interpositional material in surgical management of Oral Submucous Fibrosis (OSMF).
Methodology
The study group consisted of $15 \times 2 = 30$ patients with bilateral clinically and histopathologically proven cases of oral submucous fibrosis. Group I (buccal fat pad graft) was compared with Group II (collagen graft) post operatively for mouth opening up to 6 months follow up. Also to assess & compare the improvement in flexibility of buccal mucosa; oral pain & burning sensation on intake of spicy food & the rapidity in epithelialisation of graft at the intra-oral wound site.
Results
After 6 months follow-up & also in-between intervals, Group II subjects showed better mouth opening post operatively compared to Group I, because of less wound contracture & faster epithelization in case of collagen.
Conclusion
The collagen membrane (Group II) proved to more efficient & the result was statistically significant as it showed better Mouth opening post-operatively at 6 months, Improvement in flexibility of buccal mucosa, Reduction in post-op pain & burning sensation & faster Epithelisation rate compared to BFP (Group I).

MP3
Complex Odontome of An Edentuluous Maxillary Arch- Rare Case

V Gopalakrishnan

3 Corps Dental Unit, C/O 99 Apo

Abstract
Background
The origin of the odontoma is trauma and infection. It seems that these conditions are more likely to result in a hypoplastic tooth germ rather than an odontoma. It seems that the timing of the injury is important and that the earlier the injury occurs in life the more likely that an odontoma will develop. Odontomas have been associated with dilacerated roots in the anterior maxilla.
Objective
Odontomas can be excised locally. Most lesions are discovered as an incidental radiographic finding; however, they can be associated with significant signs and symptoms. The most common symptom is an impacted permanent tooth or a retained deciduous tooth. It was common in subjects with odontomas associated with dentigerous cysts.
Material and methods
Here we present a 62 yrs old woman who reported with chief complaints of pain and swelling in the right side edentulous maxillary arch. After confirming radiographically, excisional biopsy done and histopathology reports as a complex odontome. Odontomas usually form hard, painless masses and are small, rarely exceeding the diameter of the associated impacted tooth.
Results
Odontomas, especially complex odontomas, may become large and produce expansion of bone and facial asymmetry. The lesions consist of densely opaque masses of varying size, usually associated with unerupted or impacted teeth. These opaque masses are almost invariably surrounded by a radiolucent line. Ghost cells often are seen in odontomas, especially complex odontomas.
Conclusion
Conservative surgical excision is the treatment of choice for odontomas, because such treatment results in little to no chance of recurrence.

MP4
A Pigmented bullous maxillofacial lesion in a diabetic patient; A diagnostic dilemma

Preeti Kaur

9 Cdu

Abstract
Background
Diabetes Mellitus can be complicated by a variety of cutaneous manifestations. Cutaneous manifestations, such as neuropathic foot ulcers are universally known and have predilection for lower extremity. However, in the Maxillofacial region diabetic lesion is not yet reported in the literature. It is because of enormous blood supply to the region.
Objective
We present a case of 77-year-old female with pigmented bullous lesion in maxillofacial region as a result of uncontrolled Diabetes Mellitus (DM), which was associated with reactive lymphadenitis due to infection from carious right mandibular first molar. The patient also had Normocytic Normochromic Anaemia secondary to progressive renal failure as a result of Diabetic Nephropathy (DN). The patient developed lesion due to trauma following FNAC and high sugar levels.
Methodology & results
She was successfully managed by good metabolic control, extraction of the offending tooth, antibiotic prophylaxis and occlusive dressings.
Conclusion & results
To the best of our knowledge, this clinical scenario has not been previously reported in the context of Diabetic lesion and, therefore, may be considered in the differential diagnosis of Pigmented Bullous Maxillofacial lesions. Keywords: Diabetic lesion, Pigmented lesion, Bullous, Diabetic Nephropathy (DN), Petechiae.

MP5
Dentigerous Cyst—Case Series

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8 Air Force Dental Centre

Abstract
Odontogenic cysts and tumors are relatively uncommon lesions of the oral and maxillofacial region that must be considered whenever examining and formulating a differential diagnosis of an expansile process of the jaws. The clinical presentation, radiographic appearance, and natural history of these lesions varies considerably, such that odontogenic cysts and tumors represent a diverse group of lesions of the jaws and overlying soft tissues. By definition, a dentigerous cyst occurs in association with an unerupted tooth, most commonly mandibular third molars. Other common associations are with maxillary third molars, maxillary canines, and mandibular second premolars. They may also occur around supernumerary teeth and in association with odontomas; however, they are only rarely associated with primary teeth. Although dentigerous cysts occur over a wide age range, they are most commonly seen in 10- to 30-year olds. Radiographically, the dentigerous cyst presents as a well-defined unilocular radiolucency, often with a sclerotic border. Since the epithelial lining is derived from the reduced enamel epithelium, this radiolucency typically and preferentially surrounds the crown of the tooth. Most dentigerous cysts are treated with enucleation of the cyst and removal of the associated tooth, often without a preceding incisional biopsy. The prognosis for most histopathologically diagnosed dentigerous cysts is excellent, with recurrence being a rare finding. A total of thirteen cases of Dentigerous cyst were operated upon, four females and nine males age ranging from eight years to sixty seven years. The involvement was of lower third molar impacted canine, premolar and mesiodens in order of frequency. Presenting complaint was swelling, pain, discharge from oral cavity or numbness of jaw. All cases were operated upon by a single operator and the post surgical healing period uneventful and satisfactory six months follow up showed no recurrence in any of the cases.

MP6
Facial nerve identification & preservation during Parotidectomy: A Loni, experience

Anuj S. Dadhich

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Abstract
Facial nerve identification & preservation during Parotidectomy: A Loni, experience The most daunting task during any surgical procedure involving the Parotid gland is the identification and preservation of the Facial nerve. The nerve can be easily identified at its third part i.e. at its exit from Stylomastoid foramen which is called as the main trunk of nerve. Proper identification of anatomical landmarks is very important in identification of the main trunk before the nerve enters the gland. The dissection then extends along the nerve so as to preserve all the branches of the nerve. In this paper we would like to share our experience of 15 cases of parotidectomy (13 cases of superficial parotidectomy & 2 cases of Total parotidectomy) with preservation of facial nerve. The various anatomical landmarks like Tragal pointer of Conley, styloid process and posterior belly digastric muscle and their importance in identification and preservation of Facial nerve.

MP7
Surgical excision with chemical cauterisation in treatment of benign locally aggressive lesion—Our 9 years experience

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Abstract
Background
A variety of surgical treatment modalities are adopted for benign locally aggressive central lesions of jaws. Enucleation and curettage followed by chemical cauterization with Carnoys solution is a time tested procedure. The purpose of using Carnoys solution is to eliminate remaining pathological tissue and promote superficially induced chemical necrosis to prevent recurrence.
Methodology
In our institution from 2005 to 2014 28 cases of benign maxillofacial lesions underwent enucleation followed by chemical cauterization using carnoys solution and were kept on a regular follow up. Among these cases 16 were of odontogenic keratocyst, 12 cases were of unicystic amelobalstoma and one case was of ameloblastomatous calcifying epithelial odontogenic cyst. So hereby we share our experience of treating these lesions with the carnoys solution.
Results
A follow up period of 1 year to 3 years was taken into account with regular 6 month follow up intervals. Out of 28 lesions, 15 were odontogenic keratocystic tumours, 12 were ameloblastomas and 1 case was of ameloblastomatous CEOC. In the keratocysts, age group range was of 9–56 years was found. Out of 15, 14 were found in mandible and 1 in maxilla. 8 were males and 7 were females. There was recurrence in 1 case. In 12 cases of ameloblastomas, 10 were unicystic and 2 were of follicular variety. Out of them, 6 were males and 6 females. All the lesions were in mandible. The age group range was of 22–60 years. No recurrence has been found in any so far. The case of ameloblastomatous COEC was in a 20 year old female in the mandible and has shown no recurrence.
Conclusion
Though resection with reconstruction is regarded as the gold standard for treatment of benign locally aggressive lesion, enucleation with use of Carnoy^{TM} solution have shown promising results in treatment of odontogenic keratocysts and unicystic ameloblastomas.

MP8
Central Cavernous Hemangioma of Mandible: A Case Report

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Abstract
Intraosseous hemangiomas are one of the rarest lesion of jaw bones (0.5–1 %), occurring most commonly in vertebral column and skull bone and rarely in mandible. Mainly occurs in second decade of life with female: male predilection (2:1). Origin of hemangiomas is still debatable. World Health Organization considers it as true benign neoplasm of vascular origin and many authors believe it to be a hamartoma. It is very difficult to diagnose due to variable clinical and radiological features. Biopsy is not done in a routine basis due to higher risk of hemorrhage. Management is very difficult because of massive vascular network in that region. Here, presenting a case report of 14 year old boy with intraosseous hemangioma of right body of mandible, which was diagnosed and then treated by segmental resection of mandible followed by reconstruction. The patient is on regular follow-up and doing well.

MP9
Oral proliferative verrucous leukoplakia with oral sub mucous fibrosis treated with CO2 laser

Manoj Kumar

Indian Army

Abstract
Oral leukoplakia is one of the most common physiologic as well as pathologic white lesions in the oral cavity. Of the many variants, oral proliferative verrucous leukoplakia (OPVL) is a rare clinicpathological entity of unknown etiology. OPLV initially develops as a white hyper-keratotic plaque that eventually becomes a multifocal disease with confluent, exophytic and proliferative features.

Published case series with long-term follow-up describes OPVL as a disease with aggressive biological behavior due to its high probability of recurrence and a high rate of malignant transformation. This article describes a rare case report of OPVL associated with oral sub mucous fibrosis (OSMF) in the light of current information with clinical and histological aspect in a young patient, which was successfully treated with CO2 Laser. Key words CO2 laser, oral proliferative verrucous leukoplakia, oral sub mucous fibrosis

MP10
Buccal fat pad in OMFS case

Himanshu Thukral

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Abstract
The increase of tobacco chewing in India has lead to increase number of oral sub mucous fibrosis cases. These patients are treated surgically or non surgically depending upon the stage of presentation. The surgical treatment is resection of fibrotic bands. Numerous treatment modalities have evolved over time, with inherent advantages and drawbacks. In literature there are many modalities for reconstruction for e.g. tongue flap, palatal island flap, nasolabial flap etc, amongst which the buccal fat pad is an important one for reconstruction. In my case the healing was uneventful with the uptake of graft with good post operative results. In my presentation, i will be discussing about my success experience of use and benefits of buccal fat pad in an OMFS case.

MP11
Ameloblastoma of the jaws—A SRU Experience

Deepak C, C. Ravindran, S. Ramkumar

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Abstract
Objective
Retrospective analysis of the cases treated in Dept of Oral & Maxillofacial Surgery, Sri Ramachandra University.
Methodology
A Total of 27 patients of ameloblastoma of both maxilla and mandible were included in the study. This study focuses on the diagnosis, management & Complications associated with it.
Results
80 % of the cases showed good response with no signs of recurrence, 15 % of the patients showed flap failure, 1 patients deceased.
Conclusion
Grading of the types of amelobalstoma, site of occurence, size of the lesion and reconstruction plays a major role in the prognosis while treating this lesion of the jaws.

MP12
Efficacy and safety of Lamotrigine in patients with trigeminal neuralgia: A Comparison with Carbamazepine

Mahesh Goel, Rajiv Tanwar

PGIDS, Rohtak, Haryana

Abstract
Background
Antiepileptic drugs are increasingly used in the treatment of pain syndromes. This study evaluate efficacy and safety of Lamotrigine in comparison with carbamazepine in Trigeminal neuralgia (TN) patients.
Method
Fifty previously and newly diagnosed patients of TN were administered with Lamotrigine (LTG) in comparison to Carbamazine (CBZ). The final titration in dose for lamotrigine was 400 mg/day and 1200 mg/day for Carbamazine in equally divided doses. The clinical assessment (Pain relief) was done before and after 15, 30 & 60 days of drug administration by visual analog scale (VAS) and verbal rating scale (VRS). The side effects of both groups were recorded during the study. Results: Out of 25 patients in Group I who received Carbamizine, 16 patients (64 %) experienced complete pain relief, while in Group II of Lamotrigine, 21 patients experienced complete pain relief. LTG was generally well tolerated. CBZ was associated with mild haematological and CNS side effects.
Discussion
Result of the present study revealed that LTG is more effective than CBZ in controlling pain of Trigeminal Neuralgia. As it is evident by significantly less VAS and VRS scores in LTG treated patients as compared to CBZ. Pain relief by LTG in patients with TN may be due to effect of drug on sodium channels by reducing the release of excitatory neurotransmitter glutamate or by modulating calcium channels. Conclusion: Lamotrigine is as effect and safe treatment for management of trigeminal neuralgia as compared to Carbamazine.

MP13
Maxillofacial infection: diagnosis and management

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Abstract
Maxillofacial infections are common occurrences in day to day practice which can be potentially life threatening if not managed properly. Accurate diagnosis is essential to prevent mismanagement with potential severe consequences. There are numerous causes of soft tissue infection in the head and neck region which are related to the anatomic structures present. The origin and anatomical position of the source of infection determines subsequent development, spread and ultimate outcome. The commonest source of infection in the maxillofacial region is odontogenic. Majority of the infection are caused by Staphylococcus aureus, Pseudomonas aeruginosa and E Coli but can also be caused by Enterococcus, Klebsiella and

Enterobacter. Spread of infection in the region could be via local progression, by lymphatics or by hematogenous spread. Spread of infection is dependant upon host resistance, anatomical site of the focus of infection, and barriers including muscle or fascial planes. Occasionally fungal, viral and hospital borne infection in immunocompromised individual may cause life threatening complications. The management must include identifying the source and nature of infection, removal of cause of infection. Prompt management with incision and drainage, effective antibiotic therapy and fluid and electrolyte balance helps in combating these situations effectively. This paper presents series of such cases and discusses the etiology, differential diagnosis, host response, spread of infection and management of same.

MP 14
Life threatening complications arising from odontogenic maxillofacial space infections at tertiary care hospital in Holy capital Makkah

Sanadi Sajid Ahmed, Jameel Al-Shargawi

Al- Noor Specialist Hospital, Makkah, Saudi Arabia

Abstract

Background

Untreated or rapidly spreading odontogenic maxillofacial infections can be potentially life threatening. The present study is a review of patients with maxillofacial infections who required emergent incision and drainage, developed life threatening conditions during course of treatment at, Al-Noor Specialist Hospital Makkah.

Objective

To determine the incidence, risk factors, treatment, and outcomes of life-threatening complications occurring from odontogenic infections at Al-Noor hospital, Makkah.

Methodology

Medical records of patients admitted under OMFS services, odontogenic space infections for I&D were reviewed from June 2004 till June 2015. Patient's age, sex, medical history, apparent causes of the infection, isolated microorganisms, CT scan findings, surgical procedures, life threatening complications occurred, survival rate were recorded.

Results

A total of 179 admitted cases of odontogenic infections in the age range of 3 to 97 years were reviewed. 25.13 % (n = 45) patients were immune-compromised. One or more life threatening complications developed in 16.2 % (n = 29) patients.

Necrotizing fasciitis of face-neck n = 12
Necrotizing fasciitis of scalp n = 4
Mediastinitis n = 6
Spread to chest and abdomen n = 4
Cavernous sinus thrombosis n = 3
Multiple organ failure n = 3
Positive pressure ventilation required n = 2
Cardiac arrest n = 2
Pulmonary embolism n = 2
Internal jugular vein thrombosis n = 1
Spontaneous abortion n = 1
Death n = 8

Conclusion

Early recognition and treatment of established cases are necessary to prevent considerable morbidity and mortality, especially in older patients with an underlying systemic condition. Despite aggressive management with liberal wound debridement, intravenous antibiotics, and nutritional support, the mortality was still high due to late presentation of patients.

MP15
Submandibular Gland Excision: 4 years prospective study

A K Choudhary, Mohan Rangan

DGDS

Abstract

Background

Submandibular gland is the second largest salivary gland in human body. There are neoplastic and non-neoplastic diseases affecting the gland, while sialolithiasis is the most common non-neoplastic disease, pleomorphic adenoma is the most common neoplastic disease of the gland. The most common malignant tumor is adenoid cystic carcinoma. This study was done on surgical outcome of these three commonly occurring pathologies of the submandibular gland.

Aim and Objectives

The surgical management of submandibular gland disease has always been a challenge because it carries a considerable risk of nerve injury. The aim of the study was to evaluate the extent and success of the surgical treatment as well as possible complications in patients with submandibular gland disorders.

Material and method

Patients who underwent submandibular gland operation at various service hospitals between 2011 and 2015 were prospectively studied and results were formulated upon various complications

Results

Total 15 cases were studied out of which 07 were male and 08 were female. Neoplastic diseases were seen in 09 patients and non-neoplastic diseases were seen in 06. The most common morbidity of the surgical treatment was transient palsy of marginal mandibular nerve and most common indication for excision was sialadenitis. Commonest neoplastic benign tumor was pleomorphic adenoma, and the most common malignant tumor was adenoid cystic carcinoma. Conclusion Submandibular Gland Excision is a safe operative procedure with low rate of complications for treatment of various submandibular pathologies.

MP16
Bisphosphonate Induced Osteonecrosis—Case Report and Current Management Protocol

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Abstract

Bisphosphonates are used widely to treat osteoporosis, multiple myeloma, metastatic neoplasm, Pagets disease, other metabolic bone diseases. The fundamental biologic action of all Bisphosphonates is to inhibit bone resorption and hence bone turnover and renewal, which will in course, reduce the serum calcium level. The mandible is more commonly affected than the maxilla in 2:1 ratio and 60 % of the cases are preceded by a dental surgical procedure. Over suppression of bone turnover is probably the primary mechanism for the development of this condition, although there may be contributing comorbid factors. This is a rare case of Sarcoidosis affecting kidneys which led to hypercalcemia. Bisphosphonates were administered to treat hypercalcemia. Patient under went extraction of teeth were his medical history was not elicited, following which he developed osteonecrosis of the jaw. This disease presents a serious treatment dilemma foe the

oral and maxillofacial specialist. Complete prevention of this complication is not currently possible. This presentation summarizes the risk factors, recognition, prevention and management of Bisphosphonates induced osteonecrosis

MP17
Demystifying KCOT: A Retrospective Clinical Study of 105 Cases With A 10 year Follow Up

Omkar Shetye, Vikas Dhupar, Francis Akkara

Government Dental College and Hospital, Goa

Abstract

Background

KCOT aka OKC is one of the most common pathologies seen in the maxillofacial region usually in the 2nd or 3rd decades of life. Being an aggressive tumor in terms of recurrence, surgical treatment is very controversial and varies from marsupialization, enucleation with curettage /chemical cauterization to resection. The surgical treatment plan depends on age, site and clinico-pathological behavior of KCOT. This paper brings to light a comparative clinical finding of two most common treatment modalities given in literature.

Objective

The purpose of this retrospective clinical study is a comparative evaluation of the best treatment option for KCOT treated by enucleation with and without use of Carnoy's solution.

Methodology

A total of 105 cases treated by enucleation with and without application of Carnoy's solution were included in the study over a decade from 2001 to 2010 with upto 10 year follow up. Patients not reported for follow up or treated by other modalities were not included in the study. Evaluation criteria included the age group, sex predeliction, site of the lesion, radiologic appearance and the recurrence rate upto 10 years.

Results

The study results showed a marked reduction of recurrence rate in patients treated with enucleation followed by application of Carnoy's solution over enucletion alone. Statistical difference was also seen based on the site of the lesion and relative recurrence and radiologic appearance to recurrence rate.

Conclusion

Enucleation followed by application of Carnoy's solution should be the treatment choice for treating KCOT as it has shown to have the minimum recurrence rate and one of the most conservative treatment options.

MP18
Gorlin-Goltz syndrome: A case report with review of literature

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Abstract

Gorlin-Goltz syndrome: A case report with review of literature Gorlin Goltz syndrome (GGS) has been a relative rare pathologic entity in the world English literature. The author report a case of Gorlin Goltz syndrome (GGS) in a young patient without any skin lesions. A 21 year old male reported to our department, with swelling in the lower posterior region of the right side of jaw since last 2 years. Thorough extraoral and intraoral examinations along with orthopantomogram (OPG), CT scan (skull) and chest radiograph helped in proper diagnosis of the condition. No skin lesion in the form of basal cell nevus, palmar or plantar pits, or keratosis were present. All the cystic lesions of the jaws were enucleated surgically and chemical cauterization done by Carnoy's solution. No sign of recurrence observed still date. This case highlights the importance of the awareness of this rare syndrome, especially in young patients without any skin lesions because early detection of the disease prevent recurrence and reduces morbidity from the existent disease.

MP19
Repair of Sialocele: Conservative vs Radical Management—A study of 10 cases and review

Manish J Raghani

All India Institute of Medical Sciences (AIIMS)

Abstract

Background

10 Cases of post-traumatic recurrent Sialocele were managed conservatively as well as radically and the results were compared.

Objective

To compare between the two different types of approaches of treating Sialoceles.

Methodology

5 cases were treated conservatively and 5 cases radically by excision of gland and a comparative analysis was done.

Conclusion

Our study was concluded with the finding that the initial Sialoceles should be managed with conservative measures like frequent aspirations, pressure dressings and antisialogogues and the recurrent Sialoceles should be managed by radical surgeries like excision of gland.

MP20
Vanishing Bone Disease: A Dilemma

Ravinder Solanki

PGIDS, Rohtak

Abstract

Massive osteolysis (gorham–stout syndrome) is a rare,, insidious, chronic disease of unknown etiology that is thought to result from a localized endothelial proliferation of lymphatic vessels resulting in progressive resorption of contiguous osseous structures. Osteolysis of the jaws has been reported in association with infection, cysts, neoplasia, and metabolic, endocrine, or hematologic abnormalities. In 1838 Jackson first described a case of disappearing humerus. More than 150 cases have since been described in the international literature, with fewer then 35 involving a maxillofacial site, usually the mandible. The exact cause of this disease remains unknown, but ongoing clinical research attempts to better understand the etiology. There is no accepted treatment protocol, although most treatment modalities focus on stopping osteoclastic resorption and vascular proliferation. Patient also advised for radiotherapy or medical treatment with bisphosphonate therapy to stop the ongoing osteolytic process and allow reconstruction of the mandible.

Current paper reviews and reflects the latest etiological and treatment behaviour of the vanishing bone disease.

MP21
Massive Peripheral Giant Cell Granuloma associated with pregnancy: a report of two cases

Pooja Rani

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Abstract
Peripheral giant cell granuloma (PGCG) is a relatively common reactive exophytic lesion of the oral cavity. The influence of hormones has been suggested as contributory factor in PGCG development and predominance of these lesions in young females as well as some previously reported pregnancy related cases support this belief. It has been observed that majority of lesions present in the first 4 decades of life, when hormonal changes are most pronounced. Cailluette and Mattar in their study found that peripheral giant cell granuloma and central giant cell granuloma are under the influence of the ovarian hormones. However, Chambers and Spector suggested peripheral giant cell granuloma to be enhanced by pregnancy rather than being ofpregnancy dependent. The responsiveness of the gingiva to these hormones along with the immunosuppressive actions of the hormones contributes to the growth of the lesion. Clinically, PGCGs may present as polypoid or nodular lesions, predominantly bluish red with a smooth shiny or mamillated surface. The cases reported in literature had lesion size varying from 1.0 to 2.0 cm in diameter but masses more than 5 cm have rarely been reported. This paper presents report of two cases of massive PGCG associated with pregnancy an association which has been reported very rarely in literature. In our cases, the massive size of lesion (5 cm) may be attributed to hormonal influences during pregnancy and poor oral hygiene.

MP22
Oral Lesions—A Diagnostic Challenge

Rupal Sharma

PMVIDS

Abstract
Background
Oral cavity is considered to be a mirror to ones general health. We are able to diagnose a number of life threatening diseases by examining the oral cavity. Oral pathologies maybe large but benign and inconsequential or maybe small but malignant and life threatening. We as oral surgeons should be able to correctly differentiate normal from the abnormal and make the correct diagnosis of the abnormality.
Objective
We as keepers of the oral cavity are faced with a plethora of subjective and arbitrary criterias for the correct diagnosis of such lesions. The main objective of the paper is to discuss a few uncommon clinically misleading lesions of the oral cavity, and the dilemmas we had during the diagnosis of each.
Methodology
We discuss and compare here the clinical, radiological, histopathological features, differential diagnosis and management of a few clinically misleading and confusing lesions:- Myxoma, Juvenile Ossifying Fibroma, Squamous cell carcinoma, Pyogenic Granuloma.
Results & Conclusion
It was very well appreciated that the lesion's resemblance in the oral cavity may be misleading towards our treatment plan and lesion do mimic each other in their form structure and appearance.

MP23
Facial translocation approaches

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Abstract
Access to the skull base and its related structures were possible as a result of severe and sustained brain retraction, which invariably lead to increased postoperative neurovascular complications such as brain contusions, intracranial hemorrhage and neurovascular damage. It is a measure of success that many of these obstacles have been overcome by means of novel applications of operative techniques. The major spur to progress has been the evolution of team-work without which much of this work would never have come to fruition. The conjunction of multiple disciplines to form teams each bringing complementary expertise to bear on the tasks in hand has created a tremendous impetus to the development of the complex techniques that are often necessary to achieve optimal exposure of the conditions involving the skull base. It is true to say that there are no areas of the brains surface that are denied surgical access. This is made possible only with a close co-operation between the neurosurgeon, maxillofacial surgeon, oto-rhino-laryngologist and ophthalmic surgeon. My presentation emphasizes on the role of maxillofacial surgeon in the surgical planning of such extensively involving tumors via facial translocation.

MP 24
Maxillary Necrosis Following Fungal Infections

Prajesh Dubey

Subharti Dental College

Abstract
Maxillary necrosis can occur due to bacterial infections such as osteomyelitis, viral infections such as herpes zoster or fungal infections such as Mucormycosis and Aspergillosis. Aspergillosis and Mucormycosis are amongst the commonest of all the fungal infections involving maxillary sinus. Early diagnosis is essential in order to avoid high morbidity and mortality associated with the destructive disease and to instigate treatment before irreversible conditions arise. Here we present the two variants of fungus where early diagnosis and prompt treatment was started thereby reducing the possible morbidity associated with the two lethal invasive fungal infections. Fungal infections are common in immunocompromised patients; however in this case series we also present cases of fungal infection in immunocompetent individuals at the time of presentation.

MP25
Use of liquid nitrogen spray cryotherapy in the management of large cystic ameloblastomas in young patients

Amandeep Kaur

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Abstract

Background

In the field of oral and maxillofacial surgery, there are a number of locally aggressive bony lesions like intraosseous cystic ameloblastomas that fall short of true malignancy for mandibular resection, which causes severe esthetic- functional impairment especially in children and young adults but have a high incidence of recurrence following local enucleation or curettage only. In such cases, ideal treatment might consist of aggressive local enucleation and curettage followed by cryosurgery to devitalize a narrow rim of bone beyond the visible margins of the lesion to kill any seedlings or daughter cells that might be present.

Objective

To present four cases of large and extensive cystic ameloblastomas in young patients being managed by enucleation and curettage followed by liquid nitrogen spray cryotherapy.

Methodology

All four histologically proven cystic ameloblastomas were first marsupialised at least three months prior to enucleation. Enucleation and curettage was then followed by two cycles of liquid nitrogen spray cryotherapy.

Results

Complete resolution of lesion was seen in all the patients after 12 months. Clinical and radiographic evidence of recurrence was found in one patient at six months which showed complete healing after re-treatment with cryotherapy. No sign of recurrence was seen in any patient thereafter.

Conclusion

This treatment modality provided a safety margin required, but at the same time was conservative for the patients avoiding morbidity associated with resection. Liquid nitrogen has analgesic properties, is effective, well tolerated and has few complications which makes it an excellent option for treatment of locally aggressive jaw lesions

MP26
Flesh eating bacterial syndrome (NF): A case report

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Dasmesh Institute of Research & Dental Sciences, Faridkot

Abstract

Necrotising fasciitis of the head and neck region is a multimicrobial, uncommon soft tissue infection caused by aerobic and anaerobic microbes. It is a rapid, life threatening process characterised by necrotizing process of the subcutaneous tissue and fascial planes resulting in gangrene, massive tissue destruction and systemic toxicity. Because of the fulminant course of necrotising fasciitis, early diagnosis is imperative. Braod spectrum antibiotics, aggressive surgical treatments and supportive therapy are the corner stones of successful treatment. We report a case and treatment outcome of necrotizing fasciitis of neck region secondary to hair follicle infection.

MP27
From nasal polyp to basal cell adenocarcinoma—a journey of diagnosis from clinical to histopathology

Meera Thinakaran, Mathan Mohan, Balaguahan, G. R. Karthikeyan, Brian F Pereira

Karpaga Vinayaga Institute of Dental Sciences

Abstract

Basal cell adenocarcinoma, a rare salivary gland tumor is the malignant counterpart of basal cell adenoma showing low-grade malignancy with a good clinical prognosis. Basal cell adenocarcinoma accounts for less than 2 % of malignant epithelial salivary gland tumors. BCAC is uncommon in the minor salivary glands. Ninety percent of cases reported are in the major glands, usually the parotid, four cases reported in the submandibular gland and one in the sublingual gland. Very few cases have been reported in minor salivary glands of the palate, buccal mucosa, and labial mucosa. The average age of reported cases was in the sixth decade. We present a case of a 20 year old female patient with a history of pain and swelling in the palatal region for past 3 months and had been previously operated for nasal polyp. The patient then reported to our hospital with the same complaint. Radiological investigations were suggestive of a right maxillary polyp with fungal sinusitis and a secondary suggestion of mucocele of the right maxillary sinus. Incisional biospy revealed a diagnosis of basal cell adenoma of the minor salivary glands. Intraoperative features showed an aggresive proliferative growth suspecting a malignant transformation. Post-operative excisional histopathological study revealed a final diagnosis of basal cell adenocarcinoma. The patient was given an obturator followed by radiotherapy and frequent follow up.

MP28
An Acute Opportunistic Infection -Mucormycosis In Maxilla: A Case Report

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Abstract

Mucormycosis is a common name given to several different diseases caused by fungi of the order mucorales. In humans usually begins in nose and paranasal sinuses. Most common area in head and neck region are maxillary and orbital region especially in uncontrolled diabetes. Mucormycosis (Zygomycosis, phycomycosis) is an acute opportunistic infection caused by a saprophytic fungus that belongs to the class of phycomycetes. Several genera are associated with disease, the most common forms are Absida, Rhizomucor, Rhizopus—predominant pathogen accounting for 90 % cases of mucormycosis..A diabetic patient with exposed necrotic bone and a history of tooth extration or with a chronic infection in maxilla. It should alert the clinician to a possible mucormycosis infection. Promt and aggressive treatment is required to ensure a favourable outcome.

MP 29
Hybrid central giant cell granuloma of mandible: Report of a case

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Abstract
Background
It is not rare to find a Central Giant Cell Granuloma (CGCG) showing areas of either Aneurysmal Bone Cyst (ABC) or any fibro-osseous lesion (FOL) if the specimen is completely evaluated histopathologically. Occurrence of these dual lesions have been described in the literature. However, the occurrence of two different pathological entities contained within a CGCG has not been described before. The authors are reporting a case of CGCG mandible which was associated with two other simultaneous pathologies namely ABC and central ossifying fibroma (COF) contained within the primary lesion.
Objective
To present the clinical behaviour of this hybrid lesion and its response to treatment.
Result
Intra-lesional steroids failed to produce resolution of the lesion. Curettage resulted in recurrence of the lesion. Re-curettage with bone grafting resulted in resolution of the lesion.

MP 30
Schwannomas of Maxillofacial Region: Reports and Review

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Abstract
Schwannomas (also called as neurilemmomas) are rare benign tumors arising from schwann cell of cranial, intraspinal, peripheral and autonomic nerve sheaths. They invariably presents as solitary, benign, slow growing, well encapsulated mass. Schwannomas involving peripheral portion of the cranial nerves usually affect soft tissues of the head and neck. The reported incidence of extracranial schwannomas of maxillofacial region varies from 25–45 %. However, only about 1 % of these tumors are seen intra-orally. This paper reports cases of extraoral schwannoma and intraoral schwannoma involving infraorbital and mylohyoid nerve respectively. Review of Schwannomas of maxillofacial region in general and those involving infraorbital nerve and mylohyoid nerve in particular are also presented.

MP 31
Adenomatoid Odontogenic Tumour – A rare case report

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Dasmesh Institute of Research and Dental Sciences

Abstract
Background
Adenomatoid Odontogenic Tumour (AOT) is a distinct odontogenic tumour that is exclusively odontogenic epithelium in origin which accounts for about 3–7 % of all odontogenic tumours. It is an uncommon benign (hamartomatous), noninvasive lesion with slow but progressive growth, affecting young individuals, with a female predilection and mainly occurs in the second decade. It is located more often in the maxilla and in most cases associated with an unerupted permanent tooth. There are three variants of AOT: follicular, extrafollicular and peripheral. Treatment is conservative surgical excision and the prognosis is excellent. We present a rare case of an AOT associated with right mandibular canine in a 13 year old male patient.
Objective
To evaluate the enucleation and secondary healing in benign pathology, being the gold standard treatment in young patients.
Methodology
A 13 year old male patient with AOT was treated under local anaesthesia and proper premedication after taking detailed history and relevant investigations.
Results
Adequate secondary healing was achieved. The patient has been followed-up over 6 months without recurrence.
Conclusion
Conservative surgical enucleation is the treatment modality of choice with good secondary healing in young patients. Recurrence of AOT is exceptionally rare. Therefore, the prognosis is excellent.

MP 32
Conservative management of Odontogenic Keratocyst-A controversial topic

Amneet Sandhu, Sumeet Sandhu

SGRD Institute of Dental Sciences and Research

Abstract
Odontogenic Keratocysts have been the most controversial pathologic cystic lesions in the maxillofacial region.Considerable debate still exists regarding the recurrence rate and morbidity associated with various treatment modalities of odontogenic keratocyst. The surgical treatment options range from conservative management by marsupialization;enucleation with or without adjunctive therapy to more aggressive in bloc resection. This paper aims to discuss the management of odontogenic kerarocyst using conservative approach.

MP 33
An unusual finding of aggressive Central giant cell lesion in anterior maxilla of an old female: a case report

Amita Rani

Abstract
Central giant cell lesion (CGCL) is traditionally considered as non neoplastic localized benign bony lesion but sometimes it manifests as an aggressive osteolytic lesion. This paper presents a case of CGCL involving the maxillary anterior region in a 65 years old female patient with clinical, radiological, histopathological and surgical aspect of the lesion. The striking feature of present case is its aggressive behaviour and presence of the lesion in the anterior part of maxilla in old female patient, which is considered to be a rare finding as the lesion commonly occurs in the mandible anterior to first molar region. The lesion was successfully surgically managed.

MP 34
McCune-Albright syndrome: a case report

Shahid Beigh

Abstract
McCune Albright syndrome (MAS) is a rare, heterogenous, clinical condition caused by a rare genetic mutation. The disorder is more common in females and is characterized by a triad of cutaneous, bone and endocrine abnormalities. We describe a female patient with MAS having café-au-lait macules and deforming polyostotic fibrous dysplasia involving long bones of the limbs, skull and jaws with endocrine abnormalities (thyroid, parathyroid, and pituitary). Severe bone deformities involving almost all bones have not been described previously and this prompted us to present the current case.

MP 35
Plunging ranula in 4 months old—a case report

Samit Jain

Abstract
Ranula is an extravasation cyst found in the floor of the mouth. They develop from extravasation of mucus after trauma to the sublingual gland or obstruction of the ducts. Plunging ranulas are mucus retention cysts from sublingual gland or duct with extension into the submandibular space. A variety of surgical procedures have been quoted in the literature ranging from marsupialization, excision of the ranula, sclerotherapy, and excision of the sublingual gland.

Here we present a case of plunging ranula in 4 months old boy and treated with marsupialization and pressure packing.

MP36
Chronic Sclerosing Sialadenitis—A Case Report

Ramandeep S. Brar

Abstract
CSS is a relatively uncommon and under recognized cause of salivary gland enlargement that characteristically affects the submandibular salivary gland. The etiology of CSS is not well elucidated. Postulated factors important in its pathogensis include sialolithiasis and intrinsic ductal abnormality resulting in insippated secretions which can evoke chronic inflammation. More recently, an autoimmune etiology has been proposed which is supported by histopathological presence of variable degrees of infiltration by chronic inflammatory cells in periductal regions accompanied by periductal fibrosis. We report a case of a 40 yr old female who presented with a one year old history of painless swelling in left submandibular gland region.

Clinical and radiological investigations revealed no remarkable signs of pain or sialolithiasis. Sialadenectomy was performed and HPE confirmed the presence of non obstructive chronic sclerosing sialadenitis of submandiblar gland.

Maxillofacial trauma (code- MT)

MT1
Prevelance of cervical spine injuries in maxillofacial trauma in a tertiary referral centre in Kerala

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Abstract
Patients who report to the OMFS emergency department following trauma with maxillofacial injuries may have associated cervical spine injuries. A study was conducted in the Department of Oral and Maxillofacial Surgery, Govt.Dental College, Kottayam from November 2010 to October 2012 to assess the Prevalence of Cervical Spine Injuries in Maxillofacial TraumaThe aim of this study was to find out the prevalence and severity of cervical spine injuries associated with maxillofacial trauma, to categorize the cause of trauma and to determine the percentage of involvement of soft tissue and/ or hard tissue. The study included 432 cases of hard and soft tissue facial injuries from the supra orbital margin to the chin among the total number of 3786 trauma patients presented in the OMFS emergency department. Their charts and radiographs were then reviewed, classified, and analyzed. The study yielded a conclusive result of significantly high prevalence of cervical spine injuries associated with maxillofacial trauma and also an increased incidence of cervical spine injuries in bike riders of younger age group. This can have a devastating impact predominantly on male population in which they occur resulting in permanent disability. There was also marked number cervical injuries with soft tissue injury of the face. This data on cervical spine injuries associated with maxillofacial injuries will benefit the surgeon^{TM}s clinical judgment, early recognition and improve patient outcomes. In view of the present study, further studies are needed to evaluate the force and biomechanics of cervical spine injuries and the need for definite policy changes that should be made to prevent the morbidity and mortality associated with cervical spine trauma. Education and motivation on road safety measures are the two factors that have to be considered to improve the safety measures among general population.

MT2
Superolateral dislocation of the mandibular condyle

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Abstract
Background
Anterior and anteromedial dislocations of the mandibular condyle are seen frequently in mandibular fractures. Less frequent are dislocations of the condylar head in the lateral, medial and posterior directions whereas superior dislocation in to the middle cranial fossa is rare.
Objectives
The etiology and mechanism of dislocation has been discussed along with a brief review of the literature. Patients and method: we report a

series of seven cases encountered over the years, which, incidentally, is the largest case series reported till date with lateral and superolateral dislocation of the condyle after a traumatic injury.

Results

In all cases but one there was simultaneous fracture in the mandibular symphyseal region. In all cases but one, the condyle was reduced by manual manipulation with the patient in general anaesthesia. To our knowledge, this clinical series presents the first reported case of superolateral dislocation which required open reduction.

Conclusion

Patients were generally free from any long term complications of injury or surgery except for facial nerve paresis of a transient nature in one case. The associated fractures were reduced and fixed with bone plates and screws.

MT3
Clinical Evaluation of Surgical Morbidity Associated with Name^{TM}s Technique via Retromandibular Approach

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Abstract

Background

There are many treatment options in management of displaced mandibular condylar neck fractures, surgical management being the most difficult of all treatment modalities. Achievement of satisfactory anatomic reduction is difficult in most cases, and attempts to achieve anatomic reduction through extracorporeal reduction and fixation carries the risk of resorption of the fractured mandibular condylar head and injury to near by anatomical structures.

Objective

The aim of this study was to clinical evaluate the surgical morbidity associated with extracorporeal fixation of displayed condylar fracture via retromandibular approach.

Methods

14 male patients in the age group ranging from 24 to 35 yrs, with displaced high condylar fracture mandible were treated by Extracorporeal Fixation. Ramus was exposed through the retromandibular approach. Post operatively the patients were on maxillo-mandibular fixation for 10 days followed by active physiotherapy.

Results

Postoperative follow-up of patients ranged at the intervals of 4wks, 6, 12, 24 and 36 months; in the first 4wks and 6 months after surgery, outcomes for all patients were analyzed by evaluating the degree of interincisal opening, occlusal relationship, facial nerve function and results of imaging studies. The occlusal relationships were excellent in all patients. The mean degree of interincisal opening was 3.75 (maximum 4.0 cm, minimum 3.0 cm). No mandibular deviations were noted in any patient during mouth opening. Orthopantomogram and Postero-Anterior view showed complete anatomical reduction of the mandibular condyle fracture in all patients with resorption of condyle in two cases.

Conclusion

In displaced mandibular condyle fractures, anatomic reduction of condyle with the conventional open reduction technique can be difficult due to the limited surgical access and visual field. In such cases, extracorporeal fixation of the condyle using subsigmoid osteotomy via retromandibular approach may be a treatment of choice because it results in anatomically accurate reconstruction and low risk of complications.

MT4
Efficacy of microplates in symphyseal fractures of mandible

S. S. Ahmed, G. S. Hashmi, Abid Ali Khan, Yusufuzzaman Khan, Omar Farooq

Ziauddin Ahmed Dental College, Aligarh Muslim University, Aligarh

Abstract

Background

Two Miniplates (2.0 system) are routinely used in the treatment of mandibular symphysis fractures. In few studies a combination of one mini and one microplates has been done in to treat similar fractures. In this pilot study study we have used only microplates in the treatment of mandibular symphyseal fractures. Objective: Evaluation of efficacy of fixation using microplates and screws in management of mandibular symphysis fractures.

Methodology

Experimental study was first done on experimental models using Finite Element Analysis to assess behaviour of microplates when exposed to masticatory stresses after fixation. After this clinical study was done on patients suffering from mandibular symphyseal fractures. The patients were divided in two groups. In both the groups open reduction was done for anatomical reduction. Group I Control-treated by 2.0 miniplates and Group II (study group) treated by miroplates. Bite force, occlusal stability and post operative complications were taken as main parameters to evaluate the efficacy of microplates.

Result

Fixation by two microplates in symphyseal fractures provides adequate stability of fracture segment and complication free bone healing.

Conclusion

Microplates may be used in the treatment of mandibular fractures of symphysis region.

MT5
Evaluation of Intra Ocular Pressure In Zygomatico Maxillary Complex Fractures

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Abstract

Purpose

To study effects of zygomatico maxillary fractures and fracture reduction on intra ocular pressure (IOP).

Materials and Methods

IOPs of 20 patients with unilateral zygomatico-maxillary complex (ZMC) fractures (divided into 2 groups of 10 undisplaced, 10 displaced) were measured at various time intervals. The relationship between IOPs between the two groups at various time intervals was recorded and evaluated using independent *T* tests.

Results

20 subjects were divided into two equal groups (10 each of displaced and undisplaced fractures). Mean age of patients was 33.8 years with 90 % males and 10 % females. The change in IOP at the time of reporting, after 24 h and 7 days for patients with undisplaced ZMC fractures (Group I) was recorded and was found to be significant. The

change in IOP at the time of reporting, before and after surgery, after 24 h and 7 days for patients with displaced ZMC fractures (Group II) was recorded and was also found to be significant. The IOPs of the two groups was compared at various time intervals and was found to be significant. Also, a significant increase in IOP was noted just after fracture reduction, which could be attributed to Oculocardiac reflex (OCR), which has been proven to cause bradycardia, and in some cases, even death.

Conclusion

A cautious eye needs to be kept over IOP while reducing ZMC fractures at regular intervals and the anaesthetist has to be informed to look for any bradycardia that can occur. Tonometers should be a part of standard armamentarium while reducing and fixing ZMC fractures.

MT6
Management of malunited subcondylar fracture—a surgical dilemma

Amit Ray, Jayanta Kumar Chattopadhyay

Guru Nanak Institute of Dental Sciences & Research

Abstract

The non-surgical treatment or no treatment of mandibular subcondylar fractures may occasionally result in occlusal disharmony. Many patients present with anterior open bite. This may be attributed to displacement of proximal segment resulting in a shortened vertical ramus & lost posterior vertical facial height. Restoring the vertical ramus height is essential in the treatment of such dysfunction. Different surgical procedures have been described in literature such as osteotomies, condylectomy followed by reconstruction of ramus condylar unit, refracture & fixation etc. In the department of maxillofacial surgery of Guru Nanak Institute of Dental Sciences & Research we have managed few such cases. In this paper I will present those cases along with the review of the literature.

MT7
Preseptal transconjunctival vs subciliary approach in treatment of orbital blow out fractures

Kapil Tomar

Naval Institute of Dental Sciences

Abstract

Background

Injuries in the orbital region have profound functional as well as aesthetic implications. Treatment of orbital fractures remains one of the most controversial issues in maxillofacial trauma with regard to the classification, diagnosis, surgical approach and treatment.

Objective

This study evaluated and compared the efficacy of two orbital approaches namely the preseptal transconjunctival without lateral canthotomy and the subciliary approach for the treatment of orbital floor and rim fractures.

Methodology

Ten patients reported to NIDS, Mumbai with orbital blow out fracture, either isolated or with concomitant zygomatic complex fracture and were divided into two groups with 5 patients in each group. In one group, anatomic reduction and reconstruction was done with preseptal transconjunctival approach without lateral canthotomy and in the other group with subciliary approach.

Results

In transconjunctival without lateral canthotomy group, transient entropion was encountered in 1 patient (20 %), whereas in subciliary group, transient ectropion was encountered in 1 patient (20 %).

Conclusion

In our study, both preseptal transconjunctival approach without lateral canthotomy and subciliary skin-muscle flap approach for the open reduction rigid fixation and reconstruction of orbital blow out fractures give equally satisfactory results in terms of functional outcome and cosmesis with minimal complications.

MT8
Treatment Strategies for Mandibular condylar fractures: to open or not to open……?

Imran Khan, Sanjay Singh

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Abstract

Back ground & Objective

The treatment of mandibular condylar fractures has always attracted a great deal of interest and controversy. For effective management of condylar fractures suitable technique must be chosen depending on patients age, fracture height, presence or absence of teeth patients masticatory system etc. The objective of this paper is to present our experience in management of mandibular condylar fractures with a review to evaluate the main variables that can determine the treatment of choice.

Methodology

24 patients with 29 fractured mandibular condyle (19 unilateral & 5 bilateral) were included in the study. Age group ranged from 6 years to 44 years. 11 patients were managed by closed reduction (MMF group) where as 13 patients were treated by open reduction internal fixation (ORIF group) with the Retromandibular approach.

Results

There was no statistically significant difference between the two groups in terms of achieving functional occlusion. Two patients from ORIF group had transient facial nerve weakness which were fully recovered within 3 months.

Conclusion

We will like to conclude that in cases of where there is inability to achieve functional occlusion ORIF is indicated, where as in cases of condylar head fractures maxillomandibular fixation (MMF) can be the treatment of choice.

MT9
Bilateral Mandibular Condyle Fractures, Should We Open Both?

Kedarnath N S

Rajarajeswari Dental College and Hospital, Bangalore

Abstract

Bilateral Mandibular Condyle Fractures, Should We Open Both? Abstract Among the fractures of the mandible, condylar fractures take the lead in discussion as the factors like fear of facial nerve injury,

difficulty in surgery, and the complications following the surgery are at forefront. Of late at many centres, there is more preference to do open reduction and internal fixation for the condylar fracture and are done with relatively less complications with the developments of new instrumentation and techniques. There are various guidelines put forth by authors on treatment of condylar fractures which includes relative and absolute indications for ORIF. All these guidelines suit more aptly to the unilateral condylar fractures and there are no definitive guidelines for the cases of bilateral condylar fractures which are dislocated or overriding or in combination of both. For cases of bilateral condylar fractures it has been adviced that at the least one condyle has to be fixed by open reduction to maintain the ramal height, and the possibilities of open reduction for the other condyle was never explored. We present 2 cases of bilateral condylar fractures in which both the condylar fractures were managed by open reduction and internal fixation.

MT10
Incidence & Pattern of Maxillo-facial Fracture- 3 Years Retrospective Study

Rudresh K B

V S Dental College & Hospital, Bengaluru

Abstract
Aim
The aim of this retrospective study was to analyse the pattern of maxillofacial injuries and compare the results with similar studies in India.
Patients & Methods
The data were collected from the hospital records of Oral & Maxillofacial Surgery department of V S Dental College & Hospital between June 2013 to June 2015. The site of fracture, age, gender, etiology and pattern of fracture was analysed.
Results
Records of 190 patients sustaining maxillofacial injury were examined. Most common fractures were associated with mandible followed by ZMC fractures occurred in 3rd & 4th decade of life, male were commonly affected and main etiology was road traffic accidents.
Conclusion
Despite strict traffic rules & regulations with strict law & order, RTA still stands the main cause of Maxillofacial Injuries.

MT11
A New Step in Condylar Fracture Management

Vinayak Gourish Naik, Kirthi Kumar Rai

Bapuji Dental College & Hospital

Abstract
Early mobilization of the jaws & functional rehabilitation are considered important for the treatment of condylar process fractures. The major argument for the open reduction & internal fixation (ORIF) treatment has been that anatomic reduction and immediately mobilization will result in more physiologic functioning of the TMJ. In recent years, due to the enormous development of the internal fixation techniques, there has been an increasing tendency towards open reduction & functionally stable of condylar fracture. Although surgical treatment has been attempted in the hope of obtaining better results, some problems have remained, including the difficulty of access to the fracture site & insufficient or failed reduction of the fracture. When condylar fractures are rigidly fixed using miniplates & screws, severe condylar resorption & osteoarthrosis can occur. Opinions about indications for open reduction differ & the question of which fractures should be treated surgically has not been fully answered. Severely displaced fractures, in particular dislocated fracture from the glenoid fossa, have been traditionally considered as indications for open reduction (Zide & Kent). Repositioning of the proximal segment can be difficult in such fracture patterns. In cases in which correct & complete repositioning is uncertain intra-operatively, it may be a considerable alternative to retrieve the condylar stump & leave any ORIF of the condylar fragment undone. The aim of this paper is to highlight a new protocol in management of condylar fracture by retrieving the condylar stump in certain cases

MT12
Animal Bite Injuries In Maxillofacial Region " Our Experience

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Abstract
Background
Interaction between humans and wild animals has increased in recent times, because of overlap of habitats. A proportion of this interaction is violent. Most of the literature describing the animal injuries pertains to the involvement of soft tissues. Trauma to bones and joints is only witnessed when larger animals attack humans.
Objective
Animal Bite wounds have always been considered complex injuries contaminated with a unique polymicrobial inoculum. Many of these injuries are located on the face where fear of potential disfigurement is an overriding concern and the associated psychological consequences can be devastating. For half a century, oral and maxillofacial surgeons have remained in the forefront of the surgical treatment of these injuries. Primary closure is the standard of care for most facial bite wounds, preceded by proper wound irrigation and debridement, where indicated. Serious injuries with bone involvement should be treated according to established protocols. In all cases, clinical judgment should be used and close follow-up is recommended to reduce future complications. In our paper we will be discussing about two cases of bear maul and two cases of dog bite injury treated in our center, focussing on the issues in the general context of bite-wound management, role of prophylactic antibiotics, the possible limitations of the general axiom of primary closure including the complications and challenges involved in managing these injuries.

MT13
Abcd of Medico Legal Cases; Ignorance of Law Is Not An Excuse

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Abstract
Oral and maxillofacial surgeons will encounter cases which at the time or subsequently, would be labeled as medicolegal. Members of

our profession are liable to be called upon to give medico-legal assistance in varied circumstances and situations by police and law. Like any other witness, the practitioner is bound to answer truly all questions posed to him in the court of law. Maxillofacial surgeons not only need scientific knowledge, technical skill but also moral understanding of profession and awareness about the relevant laws of the land. Handling of a medicolegal case not only needs clinical knowledge but also sound knowledge of legal obligations. Improper understanding about implications of the cases, mistakes, deliberation, which may land us in trouble and most maxillofacial surgeons suffer some kind of medicolegal phobia. There are no set guide lines about recording of maxillofacial injuries in India. General guidelines of physical impairments of facial region have been vaguely described on a hundred point scale in manual for doctors. There have been efforts in this regard, but still a topic in dearth of exploration. With the limitations of present scenario, this paper aims to provide insight into the details of registration of MLC, examination and recording of injuries, collecting medico legal evidences and writing medico legal report.

MT14
Decision Making in Orbital Reconstruction

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Abstract
Orbital Reconstruction after trauma is a persistent challenge to many maxillofacial surgeons. It comes in a multitude of different forms. Factors affecting the aesthetic and functional outcome are association of orbital fractures with zygoma fractures, surgical approach used, repositioning the fracture fragments and the material used for reconstruction. This paper deals with these aspects in decision making for management of orbital trauma.

MT17
Frontal bone fractures -Challenges in Management

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Abstract
Fractures of the frontal bone accounts to 5–12 % of fractures of facial skeleton. Injuries to the frontal bone and sinus are one of the commonest in craniofacial trauma because of the prominence and exposure of this part of the face. Fractures of the frontal sinus are frequently associated with injuries to important organ systems located in the anterior cranial fossa and base, orbit, and nasoethmoidal region. Frontal bone fractures are characterized by depression, pain and swelling as well as persistent leakage of the cerebrospinal fluid especially when the posterior table of the sinus is comminuted and there is tearing of dura mater. Management of frontal bone fracture is a challenge, the definitive treatment of frontal sinus fractures has been an issue laden with controversy. The present line of management is in support of sinus exploration and/or obliteration in ambiguous cases. The goals of treatment are either to maintain sinus function and prevent infection or obliterate the sinus cavity and repair of anterior wall defect. Here we present a series of cases of frontal bone management done in our centre. The Challenges in management are discussed.

MT18
Changing Patterns of Maxillofacial Injury in a tertiary service hospital: a 4 years retrospective study

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Military Dental Centre, Delhi Cantt

Abstract
Background
Road traffic accident (RTA) is the most common cause of maxillofacial injury. With increase in number and high speeding amongst motor vehicle users, the maxillofacial injuries also mutated in the degree of hard and soft tissue damage to the victims.
Aim and Objective
The study signifies the changing pattern in maxillofacial injuries with the aim to evaluate the probable causes for this drastically changing scenario and the safety applications amongst Armed Forces Personnel. Methodology: This is a four years retrospective study between May 2010 and May 2014 conducted at Military Dental Centre, Base Hospital, Delhi Cantt. The study includes 238 RTA victims with maxillofacial injuries managed at our centre, who were directly brought or referred from other peripheral centres. The mode of injury, severity, duration for transportation and hospitalisation and total follow up period were the factors studied.
Result
Over a period of four years the trauma to maxillofacial region changed from maximum number of isolated fracture cases to present day scenario of maximum panfacial trauma cases. More than 90 percentage of the cases are two wheeler related. There is shortening of transportation and hospitalisation duration but review period showed a rise.
Conclusion
The need for a healthy soldier is a must for a safer country and happier men. Therefore enforcement of norms for safe driving is a must. The study emphasises this need by highlighting the monstrous evolution of maxillofacial injuries.

MT19
Retrospective study on prevalance of pediatric maxillofacial fractures in children less than 15 years of age in visakhapatnam

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Abstract
Objective
The purpose of this study was to review the etiology, incidence, type of fracture and treatment provided for pediatric patients who encountered maxillofacial injuries in Visakhapatnam district, Andhra Pradesh.
Study Design
This retrospective review of patient records was conducted during the 3-year period between 2012–2015. Age, gender, etiology, type of fracture, family income, number of siblings and treatment methods were reviewed.
Results
During this 3 year period, 60 patients below 15 years of age were reviewed, out of which 65 % were males and 35 % were females.

Mandible was the most commonly involved bone in fractures (85 %) followed by dentoalveolar segment (10 %) and maxiilary bone (5 %). Within mandible, parasymphysis was more commonly involved (44.11 %) followed by condyle (38.23 %), body (11.76 %) and symphysis (5.88 %). Fall was the most frequent etiology (55 %), followed by road traffic accidents (28.33 %) and sport injuries (16.66 %). Most of the patients belonged to the income score 1 (poor socio-economic status) followed by score 2 and 3. Hence, most of the patients in our study belonged to lower socio-economic group. Majority of cases (43.33 %) were treated with circum mandibular wiring using cap/acrylic splint and second most common mode of management was IMF (40 %).

Conclusion

The differences noted in etiology of injury, fracture patterns and associated injuries between different genders and age groups likely reflects the differing activities that each group engages in predominantly and also on the family income.

MT20
Comparative Evaluation of Anterior Parotid Transmasseteric Approach Vs RisdonS Submandibular Approach In Fixation of Mandibular Subcondylar Fractures

Sudarshan Bhat, Nk Sahoo, Id Roy, Rohit Sharma

Armed Forces Medical College

Abstract

Aim

The aim of this study was to comparatively evaluate Anterior parotid transmasseteric approach vs Risdons submandibular approach in fixation of mandibular subcondylar fractures.

Objective

1. To manage all cases of mandibular subcondylar fracture by open reduction and rigid internal fixation using titanium miniplates and screws, following Meyers lines of osteosynthesis 2. Compare the difficulty encountered by using two different approaches to access the fracture site. 3. To evaluate the result and the postoperative complications.

Patients and Methods

A series of 30 cases that were clinically and radiologically diagnosed of subcondylar fracture from September 2011 to March 2013 were divided into 2 equal groups of 15 each by simple random sampling. Group-A, cases were treated using anterior parotid transmasseteric approach and Group-B, cases were treated using Risdons submandibular approach. All cases were evaluated preoperatively, intraoperatively and postoperatively for outcome.

Result

The follow up period was 1 week, 1 month and 6 months. Mouth opening achieved in both the approaches was satisfactory. There was no deviation on mouth opening post operatively and at the end of 6 months follow up pain reduced to 0. All the patients showed precise anatomical reduction on panoramic radiograph evaluation and healing of fracture site was satisfactory.

Conclusion

The study concluded that irrespective of the choice of approach whether anterior to parotid gland or by retracting the gland along with the flap, it is more important to keep the surgical anatomy intact for lesser complications and better post operative results.

MT 21
Dental Trauma and its Medicolegal Implications

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Abstract

This paper highlights the definition, mechanism of causation and classification of dental trauma.After sustaining dental trauma detailed examination of injured is done for extra oral and intraoral injuries in conjunction of other body injuries after eliciting the detail history. Evaluation of the injuries for medicolegal purpose is done in relation to the nature, kind of weapon used to inflict them and their probable duration. The evaluation report guides the investigating agency in applying the relevant section of Indian Penal Code to apprehend the accused. Emphasis is also laid on the first and periodic examination of the accused [who is in the State custody] not only for the presence or absence of general injuries on his person but for dental trauma also, as per the direction of the apex court of the country.

MT22
Surgical management of condylar fractures using miniplates—A comparison of treatment outcomes of surgically treated condylar fractures with conservatively managed condylar fractures

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Abstract

Background and Objective

This study compared the maximum inter-incisal opening (MIO), protrusive and lateral excursive movements, occlusal stability, posterior ramal height, position of the condylar head in the glenoid fossa and facial symmetry after open and closed treatment for fractures of the mandibular condylar process.

Patients and Methods

A total of 89 patients (81 male, 8 female), 46 treated by open and 43 by closed methods were included in this study. Pretreatment Towne, orthopantomograms and CT scans were taken to classify condylar fractures, assess displacement of condylar fracture and posterior ramal height. Patients in both groups were assessed at intervals of 1, 3, 6 months and yearly thereafter and were compared based on radiographic evaluation, clinical, functional and subjective parameters. Average follow-up of 2 years was undertaken.

Results

Patients in open group achieved correct anatomical position of condylar fragment in contrast to the closed treatment group. No cases of occlusal disturbance were found in open group. There was significant difference between both groups regarding mouth opening/ sum of lateral excursion/ protrusion (47/9/6 mm in open versus 40/9/4 mm in closed group)

Conclusions

Based on this study, patients treated with open reduction and internal fixation showed better patient compliance, occlusal stability, facial symmetry and functional movements.

MT23
Correction of Post-Traumatic Enopthalmos Still A Challenge

Akhilesh Kumar Singh, Naresh Kumar Sharma

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Abstract

Background

Orbit is considered as the most prominent and complex structure of mid-facial region which contains the eyeball and its associated neurovascular structures. Trauma to the mid-facial region may result in orbital floor fracture leading to diplopia, enopthalmos, opthalmoplegia and sometimes even blindness.

Objective

Correction of post-traumatic enopthalmos remains a challenge to treat for maxillofacial surgeons. The success of the treatment depends on proper dissection and restoration of herniated orbital tissue, correct repositioning of the dislocated orbital boundaries and adequate reconstruction of orbital floor.

Methodology

A 52 year old female reported to us with complaints deformity over the left eye following the road-traffic accident. Post-traumatic enopthalmos and hypoglobus was detected due to communited fracture of zygomatico-maxillary complex. We planned for open reduction and reconstruction of orbital floor with titanium mesh.

Results

Correction of enopthalmos was satisfactory. Post-surgical orbital edema was found. Patient is regular to follow up with minor deformity.

Conclusion

Correction of enopthalmos is a challenging clinical entity, it needs systematic evaluation and treatment planning with very high precision in reconstruction.

MT24
Management of mid-facial trauma

Geeta singh

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Abstract

Background

The midface is important functionally and cosmetically serving an important role in vocal resonance as well as in the function of the ocular, olfactory, respiratory and digestive system. when considering repair of such fractures most important factor is the restoration of vertical buttresses to re-establish the structure whereas restoration of horizontal buttresses is necessary to re-establish the aesthetic of midface.

Objective

To evaluate the outcome of midface fracture managed surgically. Methodology: we studied 60 patients operated between 2013 1nd 2014 in our institute and analysed those treated with craniofacial suspension wiring, bone plating and those managed with intermaxillary fixation alone.

Result

Out of 60, 16 patients were treated with craniofacial suspension wiring (along with intermaxillary fixation), 34 with bone plating and 10 with IMF alone. Although incidence of postoperative facial palsies were higher in plated group, it provided much more stability and early return to function as compared to the other two group.

Conclusion

Open Reduction and Internal fixation has become the preferred method of treatment with the advent of plate and screws fixation thus transforming craniofacial fracture repair from obligatory long term MMF and craniofacial suspension wiring to rigid stabilization which provides an opportunity for primary bone healing allowing earlier function restoration.

MT25
Zygomatic Fracture Management—Is it time for a change ? A clinical prospective comparative study of Gillies temporal approach with intra-oral approach for arch reduction

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KVG Dental College

Abstract

Though one of the most commonly encountered cases of trauma, Zygomaticomaxillary complex fractures present a challenging diagnostic and reconstructive task to the surgeon. Although many surgical treatment modalities have been mentioned so far, various surgical techniques also have their own limitations.

Objective

To assess the efficiency of reduction of Zygomatic arch fractures using Rowe's modification of Bristow's elevator in Gillie's temporal approach versus Buccal vestibule (intra-oral) approach using various subjective and objective parameters like o time taken,

- adequacy and accuracy of reduction,
- operating ease,
- esthetic assessment of outcome,
- incidence and severity of complications,
- disability indices post-operatively, etc

Methodology

324 cases of Zygomatic fractures reporting to Father Muller Medical College and Hospital, Mangalore, between June 2009 to January 2015, requiring surgical intervention, were included in the study after implementation rigorous inclusion criterion. The subjects were randomly divided into two groups based on the treatment modality

- Group A: undergoing Closed Reduction via Gillie's temporal approach (156 subjects)
- Group B: undergoing Closed Reduction via Gillie's temporal approach (168 subjects)

Results and Conclusion

The intra oral technique proved great advantage for reducing the zygomatic arch fractures and simultaneously plating the zygoma through the same approach if required. The approach is statistically proven to be a cost effective, simple and relatively fast technique, which can be performed even under local anesthesia, does not leave behind any scars and completely eliminates the need of any additional extra-oral incision, hence proving to be more esthetic. We strongly uphold revisiting the time tested techniques and making way for a change to introduce simplicity and betterment in the treatment of ZMC fractures.

MT26
Management of craniofacial fracture: Report of three cases

Rahul Kumar

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Abstract
Road traffic accidents are still main cause of skull bone and skull base fractures. According to the literature, 40–70 % of the death occurs due to multiple fractures in the viscero and neurocranium region. Craniofacial injuries are usually accompanied by cranial and subsequent brain trauma. Between 50 to 70 % of patients of craniofacial trauma have other associated injuries that could be even more important than the fractures themselves. So firstly neurosurgical evaluation carried out to rule out the head injury followed by other evaluation in coordinated and systematic manner of all areas local or general, in order to detect the priorities in management. Goal of management is to stabilize the patient, emergency craniectomy and decompression and protection of intracranial content followed by management of facial fracture to achieve form, function. Open reduction techniques through which areas of the craniofacial skeleton could be reached through the skin and the layers of soft tissues in a safe way. Many approaches had been described by, not all are safe enough and are aesthetically accepted. Generally, the incisions should be created over the lines of minimal tension, properly dissecting the underlying structures only to reach the safest anatomical layer. The aim of this paper is to report and review the various possible surgical modalities for management of fracture in craniofacial region and their outcomes.

MT27
Evaluation of Open reduction and internal fixation of Mandibular Subcondylar fractures through Transmasseteric anteroparotid approach

Yuvraj Issar, N K Sahoo, Rohit Sharma

WLDMH

Abstract
Background
Management of mandibular Subcondylar fractures has always been a matter of debate and controversy inspite of being 1/3rd of all mandibular fractures. Literature increasingly suggests that surgical management of these fractures is superior to conservative management. Undiagnosed or indirectly treated condylar fractures can lead to severe functional impairment including poor occlusion, reduced opening associated deviation and limited mandibular lateral movements. However it is of outmost importance that the surgical procedure must guarantee maximum safety for the facial nerve and must provide a good cosmetic outcome.
Objective
In this paper we advocate a rapid and comfortable technique which fulfils these conditions and is unlikely to damage the facial nerve.
Methodology
A series of 30 patients with Mandibular Subcondylar fractures who were treated by ORIF via the Retromandibular Transmasseteric anteroparotid approach over a period of 4 years from 2011 through 2015. These patients were evaluated on various parameters such as 1) Postoperative occlusal stability 2) facial nerve integrity on the House Brackmann Facial Nerve Grading System 3) Range of Mandibular movements and 4) Scar visibility on the visual analogue scale. The patients were divided into groups A (those with isolated subcondylar fractures) and B with concomitant facial fractures.
Results
In all cases good anatomical reduction and stable post-operative fixation was achieved with mandibular movements within normal range.
Conclusion
In our opinion the Anteroparotid Transmassetric approach is appropriate for surgical management of mandibular Subcondylar fractures as it provides adequate access, ensures safety of the facial nerve and is relatively easy to master.

MT28
Study on effect of post operative antibiotic prophylaxis in maxillofacial surgical procedures

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Abstract
Study on effect of post operative antibiotic prophylaxis in maxillofacial surgical procedures Objective: to evaluate the incidence of infection in maxillofacial surgical procedures with and without postoperative antibiotics coverage Patients and methods: A clinical study was carried out of forty patients were involved in the study were assigned into 2 groups of Group 1:20 pts of Group2:20 pts of Group 1: received postoperative antibiotics of IV ciprofloxacin bd for 5 days ofGroup 2: did not receive any prophylactic antibiotic regimen ofOnly patients who had sustained solitary mandibular /zygomatic arch fractures were selected ofOnly patients who fell into the age group between 13 to 40 were included ofPatients who were suffering from any systemic conditions were excluded Result: Use of post-operative antibiotics in open reduction of uncomplicated fractures had no effect in reducing incidence of infection

MT29
Quality of Life of Patients Managed for Condylar Fractures Comparison Between Open and Closed Treatment

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Abstract
Background
The proper management of fractured mandibular condyle is one of the most controversial topics in maxillofacial trauma. Since health has been clearly defined as not mere the absence of disease or infirmity but complete physical, mental and social wellbeing of an individual, the true success of any treatment modality can be qualitatively measured by the quality of life assessment. Quality of life and health status assessment should be combined in treatment selection to best meet patients needs.
Objective
This study aims at assessment and comparison of the improvement in quality of life of patients treated for mandibular condyle fractures, by either open reduction and internal fixation or closed treatment.

Methodology
In this study, 50 patients in the age group of 20 to 60 years, with a particular category of isolated condylar fractures were divided into two equal groups. While patients in one group were managed with open reduction and internal fixation, the other group received closed treatment by a single operator. A questionnaire customized for this study was filled pre-operatively and post-operatively by a blinded observer. The results were interpreted by a second blinded observer.
Results
Significant differences were noted in results obtained from either group of patients.
Conclusion
The study concludes that surgical treatment of these particular type of fractures of mandibular condyle gave a better a quality of life and health to the patients, than the non-surgical repair for the same.

MT30
3-D Vs 2-Dimensional Miniplates—a Comparative Study of Mandibular Osteosynthesis

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Abstract
The face serves a crucial role in human interaction and injuries to it result in devastating emotional sequelae. Precise surgical technique with little margin of error is required to manage these fractures to restore preinjury anatomical form, aesthetics and function with least disability, smallest risk, and shortest recovery period for the patient. Three dimensional miniplates are easy to adjust, requires minimal tissue dissection thus least disturbing the blood supply and because of its design fixation points remain in the vicinity of fracture line its low profile design and space between plate holes permits excellent revascularization The current study is to evaluate the efficacy of the 3-D titanium miniplates as a viable treatment modality in the osteosynthesis of mandibular fractures. This study comprised of 20 patients having mandibular fractures, were taken up randomly irrespective of age, sex, caste and creedBecause of the closed quadrangular geometric shape, and the ease with which it can be contoured and adapted to the bony fragments, the three dimensional titanium miniplates provide better stabilization of fractured fragments in three dimension. Three dimensional miniplates can be used satisfactorily in cases of unstable fractures of mandible. Use of three dimensional titanium miniplates is comparatively more cost effective than two dimensional titanium miniplates as lesser number of plates and screws are needed for fixation.

MT31
Changing Trends in Pattern of Facial Fractures and Evolution of Different Fixation Techniques: An Institutional Review of Last Ten Years

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Abstract
Background
Mandibular fractures are demonstrated to be the commonest form of facial skeletal trauma. The therapeutic aim in the treatment of mandibular fractures is anatomic alignment of bone fragments, adequate revascularization and restoration of function with least morbidity. In recent years there has been a change in the pattern of facial fractures which has necessitated improvement in the treatment modalities. Methods of ORIF have changed and diversified enormously in the past few years with the instrumentation becoming more operator friendly.
Aim/Purpose
The purpose of this paper is to study the pattern of facial fractures along with the changing trends at our institute over a period of ten years.
Results/Conclusion
Data evaluated would be discussed.

MT32
Occular Injuries In Patients With Zygomaticomaxillary Complex Fractures

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Abstract
Objective
Mid face injuries commonly destroy the integrity of the orbital skeleton, and are frequently complicated by injury to the eye, ranging between 2.7 % and 90.6 % as reported in literature. The eye injuries range from simple subconjunctival haemorrhage to globe rupture. The paper aims to study the types of ocular injuries in patients with ZMC fractures
Methodology
A study of 50 patients who had sustained facial trauma sufficient to lead to a facial bone fracture was undertaken from 2007 to 2010 and the patients underwent a comprehensive examination by an ophthalmologist within one week of injury. All the patients sustaining confirmed maxillofacial fractures were examined by an ophthalmologist for any associated ocular injury.A thorough ophthalmologic examination that included assessment of visual acuity, pupillary reactivity, anterior and posterior segment examination, and extra ocular motility was carried out. The variables reviewed included patients' age, gender, mechanism of injury, visual acuity, pupillary reactivity, extra ocular motility, presence or absence of diplopia, ocular and orbital findings, and intra-orbital hypoesthesia.
Results
The most common etiology of trauma was RTA (52 %), followed by falls (24 %) in our study. In our study 80 % of the patients were males, with a mean age of 40 years. Minor ocular injuries such as subconjunctival haemorrhage, corneal abrasion, iris tear, and eye brow tear accounted for 76 % of cases. Subconjunctival haemorrhage was the most common injury, present in 64 % of the cases. About 6 % of the patients had major injuries such as ruptured globe and retinal haemorrhage, restriction of extra ocular movement occurred in 9 % of cases. 12 % of the patients presented with diplopia and traumatic optic neuropathy occurred in 2 % of patients.
Conclusion
Compared to other forms of midfacial injuries ZMC fractures are associated with higher incidence of ocular injuries. The incidence of traumatic optic neuropathy and other ocular injuries warrants a prompt ophthalmologic examination in all patients with ZMC fractures as quickly as possible to prevent morbidity.

MT33
Management of malunited fractures: multiple case series

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Abstract
Background
Maxillofacial trauma cases are being continuously treated by multiple specialities like plastic surgeons, ENT surgeons, Orthopaedic surgeons etc. The basic consideration of proper occlusion and functional rehabilitation is inevitably disregarded by these clinicians leading to deep psychological impact and frustration in the patients in the long run.
Objective
This paper is a earnest effort to highlight importance of the maxillofacial surgeon in the management of facial trauma via a series of multiple case presentations.
Methodology
Multiple cases are discussed in the presentation where the operated cases reported to us with a plethora of complaints like gross malocclusion, persistant infections and draining sinuses and trismus etc. All these patients were explained sympathetically the fallouts of the previous botched up surgery and were subjected to resurgery where occlusal correction and improved jaw movement were the main parameters emphasized upon.
Results
All the patients had significant improvement in occlusion, chewing efficiency and jaw motion. Although second surgery was more difficult to perform due to fibrosis and scarring, satisfactory results were achieved.
Conclusion
The role of maxillofacial surgeon is not only justified but personified in the management of facial trauma cases. Unfortunately lack of patient and referring doctor awareness leads to deep psychological and functional distress in these individuals which eventually can be corrected by maxillofacial surgeons only.

MT 34
A retrospective study of 6 years of various treatment modalities for zygomatico-maxillary complex fracture

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Abstract
Objective
The aim of this study was to investigate the treatment of zygomatic bone and Zygomatic Arch Fractures Without Other Facial Fractures.
Patients and Methods
A 6 year (2009–2015) retrospective study involving 510 patients admitted and treated for zygomatic bone and zygomatic arch fractures at the department of oral and maxillofacial surgery was done. The data collection protocol included: age, gender, site, type of fracture. Other data presented included clinical diagnosis, radiographic examination findings as well as preoperative and postoperative imaging for evaluation of the fracture. Descriptive statistics was performed with SPSS version 16.
Results
The ages of the patients ranged from 15 to 76 years old, 452 of the patients were males and 58 were females. According to the site of fracture, the patients were divided into three categories: category A, with zygomatic bone fracture, category B with zygomatic arch fracture and category C with co-existing zygomatic bone and zygomatic arch fracture. The treatment of both fractures was: closed reduction for isolated zygomatic arch fractures; open reduction and internal rigid fixation through various surgical approaches, with 2point and 3point fixation was performed in comminuted and displaced fractures.
Conclusion
In this study, the majority of the patients were young adult men; road traffic accidents were the leading cause of fractures. According to the site of fracture, various modalities of treatment were used and all the patients achieved satisfactory results with few complications after operation.

MT35
Treatment of Frontal Sinus Fractures: Review

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Abstract
Frontal sinus fracture management is still controversial and involves preserving function when feasible or obliterating the sinus and duct, depending on the fracture pattern. There is no single algorithm for the choice of management, but appropriate treatment depends on an accurate diagnosis using physical examination, computed tomography data, and the findings of intraoperative exploration. The amount and location of fixation and the need for frontonasal duct and sinus obliteration or elimination of the entire sinus depend on the anatomy of the fracture in general and the extent of involvement of the anterior wall of the sinus, the frontonasal duct, and the posterior wall in particular. This article discusses an algorithm for frontal sinus fractures that was obtained from the literature and modified according to the authors experience.

MT38
Etilogy and Pattern of Mandibular Fractures In Bhubaneswar—An Institution Based Study

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Institute of Dental Sciences Bhuubaneswar

Abstract
Objective
Randomized prospective study to analyze the etiology and site of an epidemiological study of mandibular fractures diagnosed in IDS, SOA University, Bhubaneswar, Odisha, India.
Methodology
The population included patients treated by a Department of Oral and Maxillofacial Surgery and Traumatology, IDS, SOA University from January 2011 to January 2014, diagnosed with mandibular fractures. The variables analyzed for the study were gender, age, etiology and site of fractures.

Results
A total of 170 cases were diagnosed and categorized according to mentioned above.
Conclusion
Male patients were predominant with main etiology being RTA and the most common site being parasymphysis followed by condyle.

MT39
Current Concepts in the Mandibular Condyle Fracture Management: Open Reduction Versus Closed Reduction

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Abstract
In the treatment of mandibular condylar fracture, conservative treatment using closed reduction or surgical treatment using open reduction can be used. Management of mandibular condylar fractures remains a source of ongoing controversy in the treatment of maxillofacial trauma. The incidence of condylar fractures is high, but still the management of mandibular condyle continues to be the controversial. There are many different methods to treat this fracture. Earlier closed reduction with concomitant active physiotherapy conducted after intermaxillary fixation during the recovery period had been mainly used but recent years open reduction with rigid internal fixation has become more popular.
Objective
The objective of this review was to evaluate the main variables that determine the choice of an open or closed method for treatment of condylar fractures. Methodology: Based on the medline search for article regarding the management of mandibular condylar fractures.
Result
For dislocated fractures, open approaches are considered as the treatment of choice in many units. But for moderately displaced condylar fractures, open method is still controversial. The treatment method must be chosen taking in to consideration of the presence of teeth, fracture height, patients adaptation, patients masticatory system, limitation of mouth opening, disturbance of occlusal function, deviation of mandible.
Conclusion
Anatomical reduction with bone to bone contact is always for better healing and less postoperative recovery period. Functional results which were clearly in favour of open reduction and fixation of moderately displaced condylar fractures.

MT40
Management of comminuted naso-orbito-ethmoidal complex fracture in Bear mauled patients

Rangila Ram

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Abstract
Background
The bony orbit houses the globe and peri-orbital contents, and therefore injuries to this region have paramount functional and aesthetic implications. Naso-orbito-ethmoid (NOE) bony injury comprise of four fractures (nasal bone, frontal process of maxilla at the glabella, inferior orbital rim, and the medial orbital wall), which can be understood as, one where dislocation occurs in the medial orbital rim to which the medial canthal tendon is attached.
Methodology
A total of 26 patients with Naso-Orbito-Ethmoid trauma reported to the department of Oral and Maxillofacial Surgery, G.D.C, Shimla, between period of 2012 to 2014. Diagnosis was made based on clinical and radiographical analysis. The Naso-orbital-Ethmoid fractures were classified using Markowitzâ]s classification. Patients were treated using various surgical approaches.
Result
A total of 37 surgical approaches were used in the treatment of fractures of the NOE region in 26 patients. Out of which there were 7 Existing lacerations; 7 Maxillary vestibular approach; 7 Subtarsal incisions; 6 Transconjunctival incisions; 4 Bicoronal incisions; 3 Lynch incision; 2 Horizontal Nasal Radix and 1 Open-Sky incision. A total of 54 areas in relation to the NOE complex, which required fixation has been evaluated and tabulated. Fixation was done at 18 Naso-Frontal, 15 Naso-maxillary, 11 Infra-orbital rim and 2 Medial orbital rims. Reconstruction using Titanium orbital mesh was done in 4 cases of combined Medial orbital wall and floor. In four cases medial canthopexy was done using 1-0 Silk sutures.
Result and conclusion
Early operative intervention, wide exposure, anatomic reduction and stable fixation accompanied by immediate reconstruction using either alloplastic or autogenous materials provide the most successful treatment of this very delicate and complex region of face.

MT41
Precontoured Titanium Mesh for Reconstruction of Blow Out Fractures of Orbit: A Prospective Study of 20 Cases

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Abstract
Aim and objectives
To assess the adequacy of internal orbital reconstruction & restoration of functional and aesthetic outcome using precontoured titanium mesh.
Materials & Methods
Study was conducted from year 2011 to 2014. A total of 20 patients (19 male and 1 female) within the age group 17–50 years were included in this study who reported to Department of Oral and Maxillofacial Surgery, Mamata Dental College, Khammam, with orbital floor fracture, with mean size defect of 2.725 cm^2. 10/20 patients had enopthalmous, 9/20 had diplopia and 6/20 had restricted extra ocular movements, 12/20 had paresthesia and 3/20 had ptosis of the eye. Repair was done within 23 days using various approaches, 11 cases subciliary, 5 cases transconjunctival with lateral canthotomy, 4 cases through existing laceration. Precontoured titanium mesh of 3 cm $\times$ 3 cm $\times$ 1 mm size, with its greatest width at infraorbital rim and 1.6 cm towards optic foramen was used for orbital floor reconstruction. Postoperative clinical examination and radiographic investigations were used to assess adequacy of floor reconstruction.
Results
Enopthalmous subsided within 23 weeks; diplopia and restricted extra ocular movements subsided within 57 days; paresthesia subsided in 720 days and ptosis subsided within 15 days postoperatively. One

patient among the group of subciliary approach had ectropion and scleral show. No complications were seen with other approaches.

Conclusion

Precontoured titanium mesh is convincingly helpful to reconstruct the key areas in orbital floor in order to prevent late enopthalmous and diplopia and stays at safe distance from optic canal.

MT 42
Assessing and Managing Maxillofacial Trauma

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Abstract

The incidence and epidemiological causes of maxillofacial (MF) trauma varies widely in different regions of the world due to social, economical, cultural consequences, awareness of traffic regulations and alcohol consumption. According to the studies in developed countries assault is the leading cause of facial fractures followed mostly by motor vehicle accidents, pedestrian collisions, stumbling, sports and industrial accidents but the leading cause shifts to road traffic accidents in underdeveloped or developing areas of the world followed by assaults and other reasons including warfare. Diagnosis and management facial injuries are a challenge particularly in the setting of coexisting polytrauma in emergency department. Our goal is to broaden clinical data of MF trauma patients for public health measures. It is our credence that broader knowledge of MF trauma patients' epidemiological properties and trauma patterns with simultaneous injuries in different areas of the body may help emergency physicians to deliver more accurate diagnosis and decisions. In this study we analyze etiology and pattern of Maxillofacial trauma and coexisting injuries if any.

Orthognathic Surgery and Distraction Osteogenesis (code- OD)

OD 1
Surgical management of mandibular hypolasia: Benefits & complications

Indranil Deb Roy

Armed Forces Medical College, Pune

Abstract

Introduction

Mandibular hypoplasia is a frequently encountered craniofacial difference and can be classified into three groups: congenital, developmental and acquired. The features are highly variable in its clinical presentation and its aetiology. Congenital hypoplasia most frequently results from maldevelopment of the first and second branchial arches, either unilateral or bilateral. Developmental hypoplasia presents with a class II malocclusion and underdevelopment of the mandible for unknown reasons. Acquired hypoplasia includes oncologic defects, radiation damage, trauma and hemifacial atrophy.

Objective

The degree of hypoplasia is quiet variable and, when severe, can lead to significant functional issues at birth. In addition to respiratory concerns, these patients experience persistent airway obstruction with frequent hypoxic episodes and resultant poor feeding. As the patient grows and develops dentition, occlusal discrepancies result in poor feeding and becomes hindrance for maintaining good oral hygiene. They may also develop speech problems. Management of the growing patient with mandibular dentofacial deformities presents a unique and challenging problem for orthodontists and surgeons. The surgical procedures required for correction of the deformity may affect post-surgical growth and dentofacial development. Further, facial growth may continue postoperatively and negate the benefits of surgery performed, resulting in treatment outcomes that are less than ideal.

Methodology

Bilateral sagittal split osteotomy (BSSO) is the traditional surgical technique used in the treatment of Class II mandibular hypoplasia. However with the advent of distraction osteogenesis, this procedure provided an alternative to treat mandibular deficiencies. Its initial success in the treatment of Teacher Collins syndrome, hemifacial microsomia and other mandibular deformities led to its application in cases where orthognathic surgery would usually have been performed.

Results

This presentation focusses on the benefits and the complications associated with the management mandibular hypoplasia by standard orthognathic surgery and distraction osteogenesis over a 4 year period.

OD2
TMJ Response Towards Mandibular Orthognathic Procedures

Deepa B. V., Kirthi Kumar Rai

Bapuji Dental College & Hospital

Abstract

Temporomandibular joint (TMJ) is the area where the mandible articulates with the temporal bone of the cranium. It is one of the most complex joints in the body and is technically considered as "ginglymarthroidal" joint. Orthognathic surgeries and predominantly bilateral sagittal split ramus osteotomy have significant influence on the TMJ. TMJ response to the mandibular advancement surgery is sporadically associated to arthralgia (pain), functional limitation, condylar resorption & skeletal relapse. TMJ dysfunction is common finding in the general population with an incidence of 20–25 % after mandibular orthognathic procedure. The TMJ response ranges from adaptive, which include physiological bone remodelling to irreversible complications. There is controversy as to the appropriate management of patients with pre-existing internal derangement of the temporomandibular joint who require orthognathic surgery for the correction of malocclusion and jaw deformities. There are 2 significantly different philosophies: although some investigators contend that orthognathic surgical procedures help in the reduction of TMJ dysfunction and symptoms, other researchers have shown that orthognathic surgeries in such patients causes further deleterious effects on the TMJ and thus worsens the symptoms and dysfunction post-surgery. The second philosophy proposes surgical management of TMJ pathology at an initial separate procedure or concomitantly with the orthognathic procedure. This dichotomy of opinion has created confusion in our speciality as to the management of these patients. The aim of this paper is to highlight the altered joint relation in regards to disc/condyle complex by mandibular orthognathic surgery and its influences towards the final outcome.

OD3
Distraction Osteogenesis in the Maxillofacial Region: Beyond the Looks

Abhay T Kamath, Manish Bhagania

MCODS, Manipal

Abstract

Background

Distraction Osteogenesis (DO) in maxillofacial region is a novel technique to improve facial aesthetics and form and that eventually help in the overall functioning of the maxillofacial physiology. DO has been used for native bone, resected bone and even upon grafted bone with varying results. The quality of the callus regenerate has been found satisfactory for oral rehabilitation.

Objective

To employ the benefits of distraction to help overcome the problems of decreased airway space in patients with hypognathia of the lower jaw due to Temporomandibular Joint (TMJ) ankylosis.

Methodology

Two patients (two males) with severe hypognathia due to TMJ ankyloses. Apart from the disturbance in the facial esthetics and orofacial functioning these patients were suffering from a severe obstructive sleep apnea – a major disability of TMJ ankyloses. Pre-operative work up was done for the staging of the TMJ Ankylosis, medical fitness and grading of the sleep apnea. Both patients were operated with a multivector extraoral distraction appliance from two different manufacturers. A standard protocol of latency, distraction and consolidation was followed and the improvements for airway space was assessed by post-operative sleep studies.

Results

Both patients showed significant elongation of the bony component and remarkable improvement from the obstruction in the sleep apnea as proved by the sleep study. Conclusion: In the end, it's not just the looks and esthetics that matter, as DO has shown that an improvement of the orofacial physiology and functioning can enhance the overall quality of the life.

OD4
Reverse Sagittal split Osteotomy Mandible as a multi utility procedure

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Abstract

Objective

Reverse Sagittal split osteotomy orginally introduced in corection of post TMJ ankylotic defects. But can be used as treatment for other mandibular defects as well as sleep Apnoea.. As Intra oral procedure. Results; Very convincing Conclusion. Can be a versatile technique with proper planning.

OD6
Profile Changes and Stability following maxillary distraction with RED in adult CLP patients

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Abstract

Background

Cleft lip and palate (CLP) patients generally require maxillary advancement to correct maxillary hypoplasia Orthognathic surgery and Distraction osteogenesis (DO) are the most favoured surgical treatment modalities for cleft maxillary hypoplasia. The advantage of maxillary DO is that the maxilla can be lengthened to a greater extent and is found to be more stable.

Objective

To analyze the hard and soft tissue profile changes as well as the upper airway changes after DO using Rigid External Distraction (RED) device in adult CLP patients. The study also evaluates the stability of the surgical result.

Methodology

Three lateral cephalograms were taken: Predistraction (T1), Postdistraction (T2) and 1 year after distractor removal (T3). The treatment changes were analyzed (T1 vs. T2) and the stability (T2 vs. T3). The overall treatment changes after one year were also evaluated (T1 vs. T3).

Results

11 CLP patients were retrospectively analyzed. The anterior facial height, the soft tissue profile and the incisor exposure significantly improved. The upper airway also improved. After 1 year follow up, there was a significant maxillary relapse of 34 %.

Conclusion

The clinician should have an understanding of the related hard and soft tissues as well as airway changes which may assist him when planning for maxillary advancement for CLP patients with DO. There were significant improvements just after distraction but during the one year follow up some relapse was seen. This stressed on the need for overcorrection of about 30–35 % for adult cleft lip and palate patients.

OD7
Estimation of blood loss during Le Fort osteotomies

K Kamalpathey, Ramen Sinha, PK Chattopadhyay, SK Roy Chowdhury

Army Dental Centre (R&R)

Abstract

Background

Le Fort I maxillary osteotomy is the most common done procedure for correction of dentofacial deformities with considerable perioperative blood loss that may require blood transfusion. Hypotensive anesthesia is still an established and effective technique to control blood loss and is particularly useful in orthognathic surgery.

Objective
The purpose of our study is to estimate the blood loss during Le Fort osteotomies and its modifications under normotensive compared with hypotensive anesthesia in order to assess the need for transfusion and to propose a rationalized blood ordering guideline for usage of blood and blood product, if any.
Methodology
This study was conducted at Department of Oral & Maxillofacial Surgery, Armed Forces Medical, Pune comprising of 20 patients who underwent Le Fort osteotomies under GA during the period between Aug 2008 and Aug 2014. Pre-weighed gauzes, standard sized abdominal gauze pads, high pressure vacuum suction apparatus were used for estimate the blood loss and the collection in the suction canister with total volume of fluid used. 10 patients (50 %) were operated under normotensive and 10 patients (50 %) under hypotensive anaesthesia respectively and average blood loss in patients operated under hypotensive anaesthesia was 334.15 ml (range 289.5 to 415.5 ml) and 414.80 (range 384.5 to 449 ml) for patients operated under normotensive anaesthesia.
Conclusion
Le Fort osteotomy causes an average blood loss of 374.475 ml (range 289.5–449 ml). When operated under hypotensive anaesthesia there is a significant reduction in blood loss of about 20 % to 40 % in comparison to normotensive anaesthesia.

OD8
Chin-A Determinant of Aesthetics in Vertical Maxillary Excess??

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Abstract
Vertical Maxillary Excess (VME) has been studied extensively and retropositioned chin is one of its signs as evident by literature, consistently overshadowed by Gummy Smile, with respect to the treatment protocol of VME. Chin position has always been subjective in nature and its contribution to the overall correction of VME, leading to facial harmony and aesthetics, has been overlooked. Our study aims to objectively assess this spatial arrangement of the chin with respect to cranial base and elicit its importance in diagnosis and treatment planning of VME. 50 patients with clinical diagnosis of VME in the age group of 18–50 years, without concurrent mandibular excess or craniofacial anomalies/syndromes comprised the sample. Lateral cephalograms of these patients, achieved according to standard protocol, were subjected to cephalometric analyses (COGS, Steiner, NY, Jarabak) with the help of Dolphin Cephalometric Assessment Software. Statistical analysis revealed 1) Decreased ramus height and mandibular length infers a more posteriorly and inferiorly positioned chin and vice versa 2) There was direct correlation between horizontal and vertical positions of the chin indicating that both moved in tandem with each other 3) 15 patients had a relatively near normal chin based on cephalometric analyses Based on these results, we can conclude 1) The decision of genioplasty depends on position of the chin 2) Relatively near normal chin does not require genioplasty owing to phenomenon of autorotation 3) Postero-inferior and postero-superior chin requires augmentation genioplasty with superior and inferior repositioning respectively 4) Antero-inferior chin requires reduction genioplasty with superior repositioning

OD9
Alveolar Distraction and Implants- Current Perspective

Vivek Saxena

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Abstract
Background
Alveolar distraction & Subsequent Prosthodontic rehab by Implants is a modality with far reaching positive consequences for the patient.
Objective
To check the stability of the implant prosthesis in distracted bone.
Methodology
We selected 10 cases of resorbed residual alveolar ridges. All the patients were subjected to Alveolar distraction by TRACK device as per Distraction protocol. After clinical and radiological evaluation, implants were placed & Subsequently rehabilitated with endosseous implants. The implants were evaluated for stability and the cases followed up for 1 year.
Results
8/10 patients showed good outcome of combined treatment. 2 patients had failure of implants in the form of persistent paraesthesia and infection leading to implant loosening.
Conclusion
Patients treated with alveolar distraction are good candidates for Dental implants if protocols are strictly adhered to.

OD10
Alveolar distraction osteogenesis: A clinical, histological and radiographical assessment of efficacy for dental implant based rehabilitation

Anjali Kundu, Gaurav Mittal, Puneet Kalra

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Abstract
Background and Objective
The ADO is a method that allows augmentation of alveolar ridge height with new bone formation as well as obtaining a significant increase in the surrounding soft tissues, offering a predictable result, with low morbidity and infection rates and a significantly shorter waiting period for rehabilitation with implants (12 weeks) in comparison with the traditionally used methods. Hence the present in vivo study was taken to clinically, histologically & radiographically the efficacy of ADO for dental implant based rehabilitation.
Methods
The 5 patients selected were in the age group of 16–52 years. Healthy patients with vertical deficient alveolar ridge were selected who did not have any history of major systemic illness. Distraction was carried out in two stages. Stage 1: Placement of the distraction device and the distraction. Stage 2: Surgical removal of the distraction device after the consolidation phase and simultaneous implant placement. Results: The increase in the alveolar height varied from 4.0 mm to 6.0 mm. The average vertical bone gain was 5.0 mm. There were no intraoperative complications. However postoperatively there was infection in 1 case, Wound dehiscence in 1 case and temporary sensory disturbance was not seen in any of the cases. All the complications were treated and resolved, they were minor in nature & successful rehabilitation of the patients was achieved with implant placement.

Conclusion
ADO is an advantageous technique, providing both soft and hard tissue reconstruction with original structures. Key Words: Alveolar Ridge Augmentation, Distraction osteogenesis, Mandible

OD11
Giant Osteochondroma of the coronoid process: 2 rare case reports

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Abstract
Osteochondroma or solitary osteocartilagenous exostosis is characterized by cartilage-capped osseous lesion, protruding from the surface of affected bone. It is one of the most common benign bone tumor in axial skeleton and infrequent in maxillofacial skeleton. Oscar Jacob was the first to describe osteochondroma of the coronoid process, naming it "Jacob disease." The tumor usually grows progressively, leading to a mushroom-shaped enlargement of the coronoid process. Later it forms a joint-like structure between the coronoid process and the inner aspect of the zygomatic arch. The major symptoms include restricted mouth opening and morphological changes to the zygoma. This paper describes a giant osteochondroma of coronoid process in a 20 year old woman, who presented us with the chief complaint of limited mouth opening (15 mm inter incisal distance) and pain at preauricular region without any facial swelling, asymmetry or TMJ problems. Based on clinical examination, panoramic radiography and computed tomography images a provisional diagnosis of osteoma or osteochondroma of the coronoid process was made. Under general anaesthesia through intra oral approach excision of the bony tumor along with the coronoid process was performed, with recovery of mouth opening up to 40 mm immediately following surgery. The histopathology of excised specimen revealed features suggestive of osteochondroma. After follow up period of 2 years patient is symptom free. Here we are presenting and discussing the complete diagnostic and treatment aspect of this unusually large osteochondroma of coronoid process of mandible.

Reconstructive surgery (code- RS)

RS2
Reconstruction of Post Traumatic Saddle Nose Deformity with Split Calvarial Bone L-Shaped Strut

S Sudeep

Indian Army

Abstract
Background
Correction of Saddle nose deformities is one of the most challenging of rhinoplasty surgeries. Provision of adequate soft tissue support entails the use of some kind of graft as a strut to prop up the collapsed tissues.
Objective
To assess the efficacy of a split calvarial bone L-shaped strut in correcting septal saddle nose deformities from various underlying inflammatory conditions and surgical resection.
Methodology
Prospective clinical and radiological evaluation of patients included in the study was carried out to assess for complications and aesthetic outcome for period of one year.
Results
Seven patients taken up for nasal reconstruction by a single surgeon using the split calvarial bone L-shaped strut technique with postoperative follow-up of one year (range 13–24 months).. All cases resulted in an augmented, straightened nasal dorsum and increased tip projection. Results were maintained throughout follow-up with no evidence of graft infection, resorption, or migration.
Conclusions
The split calvarial bone L-shaped strut provides dual benefits of dorsal support and increased tip projection. The results of augmentation are quite stable for use in patients with substantial post-traumatic septal saddle nose deformities.

RS3
Transoral resection and immediate reconstruction of the mandible with bicortical non-vascularised iliac crest bone transfer: An Innovative technique

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Abstract
Mandible resection results in aesthetic, functional and psychological disabilities to the patient. Conventional extra oral approach through a submandibular incision has been used routinely for hemi-mandibulectomy, which facilitates better accessibility, en bloc resection and haemorrhage control. But the extra oral scar and the risk of damage to marginal mandibular nerve is a major setback especially in younger patients. Transoral approach for resection and immediate reconstruction of the mandible particularly for benign tumours is a viable option to circumvent the above issues. The familiarity of the anatomy of the orofacial region with current advances in instrumentation and technique makes transoral resection and reconstruction of the mandible an excellent alternative. A series of 15 cases of hemi-mandibular resection and immediate reconstruction with bicortical non vascularised iliac crest bone graft, with and without disarticulation carried out via a transoral approach between 1998 and 2012 are presented with a mean follow up period of 6.5 yrs. The transoral approach preserves good facial contour, avoids facial scars and provides optimal cosmesis. The only article that describes the transoral approach for mandibular resection and immediate reconstruction of the mandible with a bicortical non-vascularised iliac crest bone in the last 50 yrs is by Hugo L Obwegessor in 1966. In our experience this technique despite being technically demanding and operator sensitive is a reliable alternative to traditional extra oral methods.

RS4
Comparative Evaluation Between Use of Temporomyofascial Flap and Rehabilitation With Obturator Following Unilateral Maxillectomy

Syed Ansar Ahmad

Jamia Millia Islamia

Abstract
Background
If any pathology occurs in human facial skeleton, pathology has to be removed and defect has to be reconstructed. For unilateral maxillectomy cases debate is between use of surgical reconstruction or prosthetic rehabilitation.

Objectives
To utilise the temporomyofascial flap for reconstruction of the defect following unilateral maxillectomy and to compare, corroborate and analyse with similar defects where maxillofacial obturator prostheses has been utilised for adequate rehabilitation.
Methodology
Patient treated by maxillofacial obtuator were compared by patients treated by temporomyofascial flap and obturators.
Result and Conclusion
Aesthetically and functionally temporomyomyofascial flap was better in most of the patients except in those cases where time to time inspection of the site is required.

RS5
Hair follicle Transplantation on scar tissue: Learning To Perform

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Sumukha Maxillofacial Trauma and Reconstruction Centre

Abstract
Background
Loss of hair bearing tissue in the head and neck area can result from surgery, trauma, burns, tumors, and infection as well as diversity of inflammatory conditions and the resulting defect can present a challenging problem for the reconstructive surgeon. Hair transplantation can be used alone or in conjunction with other techniques for the management of the same. The current method of using follicular unit grafts has led to natural restorations for a variety of areas including not only the scalp but also eyebrows, mustache, and beard areas.
Objective
To present cases of scar camouflage in the patients operated for cleft lip and post trauma scar resulting to hair loss over lip, chin and eyebrow. Also a note on why increased awareness is needed to incorporate hair transplant surgery into the curriculum of Oral Surgery.
Methods
Our study group consisted of 11 cases of 10 patients. The causes of scar resulting to hair loss were trauma and surgery. Follicular unit extracts were harvested from occipital, posterior auricular and nuchal area. Result: The follow up cases over 6 months were 10 out of 11.
Result
After hair transplantation were excellent (50 %), good (40 %) and fair (10 %).
Conclusion
Camouflage done by hair grafts provides results not obtainable with other methods and increased awareness is needed to incorporate hair transplant surgery into the curriculum of family of corrective surgery subspecialty one among which is Oral and Maxillofacial Surgery.

RS6
Submental Flap: A Safe and Simple Solution for Complex Intra-Oral Defect

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Assam Medical College

Abstract
Background
Reconstruction of intra-oral defects are always challenging. These defects require thin and pliable tissue for reconstruction. They should also have a dependant blood supply. Submental flap fulfils all these criteria. Apart from this it gives best possible colour match with the surrounding tissue.
Objectives
The complexity of reconstructing the intra oral defects is well known to the oral and maxillofacial surgeons. Though free flaps are the most ideal for most of these defects, many a times submental flap may provide a simple alternative.
Methodology
Submental artery is a constant branch of facial artery. While harvesting the flap if initial dissection is started at the lower border of submandibular gland and cut the fascia meticulously one can easily see the submental vein and artery. Once the vascular pedicle is visualized the dissection becomes simple. Flap is dissected in subplatysmal plane on both the sides. However it may be required to take a part of anterior belly of digastrics muscle on the pedicle side to keep the vascular supply safe.
Results: We have used submental flap for reconstructing defects of floor of the mouth and found it to be safe and simple. It has a robust vascular supply which is absolutely necessary for defects created after oncological resection. The donor site scar is hidden behind the mandible, so it is also aesthetically pleasant for the patient Conclusion: Submental flap is criticised for compromising submental group of lymph node dissection, therefore oncologically sound neck dissection must be assured.

RS7
Cranioplasty Using Autoclaved Autologous Calvarial Bone Graft For Reconstruction of Cranial Bone Defects

Akhilesh Prathap

Pushpagiri College of Dental Sciences

Abstract
Cranioplasty is a widely performed surgical procedure for reconstruction of calvarial bone defects which has aesthetic functional and therapeutic benefits.various methods for reconstruction of the calvarial bone defects have been proposed including the use of autogenous and allograft materials. The major problem encountered with autologous bone graft is bone resorption and allograft is higher infection rates. the objective of this presentation is to evaluate retrospectively the outcome of cranioplasty procedures done in our centre over the past nine years using autoclaved autologous calvarial bone graft The way the bone graft is sterilized and stored for the cranioplasty after the decompressive craniectomy in our centre differs from conventional procedures described in the literature favorable results were obtained using our method with less number of cases undergoing resorption and infection than usually reported in the literature.our procedure has the added advantage of avoiding a secondary surgery for the patient since the graft is stored outside the body of the recepient.

RS8
Karapandzic Flap In Reconstruction of Post-Surgical Carcinoma Lower Lip Defect

Naresh Kumar Sharma, Akhilesh Kumar Singh

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Abstract
Background
Reconstruction of lower lip is a challenge to the surgeon who seeks excellence in restoration of both aesthetics and functions. The defects

may arise either due to trauma, developmental anomaly or post-excision of malignant conditions.

Methodology

We report a case 60 year old male with squamous cell carcinoma of left two third of lower lip with no cervical lymphadenopathy. His medical history was suggestive of cardiac dysfunction i.e. left bundle branch block. Due to high cardiac risk, we planned for wide local excision of lesion followed by reconstruction with karapandzic flap.

Results

Healing was satisfactory with restoration of the lower lip continuity with like tissue. Scar and microstomia was observed. Patient was sent for postoperative radiation.

Conclusion

Karapandzic flap technique is very successful in getting like tissue for reconstruction and maintaining the original neuro-vascular integrity of the lip. So, this flap may be considered as Work-Horse in reconstructing central/ lateral two third defects of the lower lip.

RS9

Couplers Anastomosis—Ease for surgeons in Microvascular surgery

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Sibar Institute of Dental Sciences and Hospital

Abstract

Background

Alexis Carrel gave description of the first successful arterial anastomosis in 1902, Continued refinement of the technique has led to reproducible results and expanding applications beyond his initial goal of organ transplantation.

Objectives

Sutured anastomoses of small vessels are considered difficult to learn. Mechanical anastomosis systems allow a more rapidly performed anastomosis.

Methodology

Microvascular anastomotic coupler system (MAC) is based on eversion of the vessel walls over two pinned rings, which then are brought together using a specially developed instrument, completing the anastomosis.

Results

The MAC couplers are easy to handle if the vessel walls are thin. Microvascular anastomoses with the MAC coupler are quick and reliable, even for beginners in microsurgery. The vessel walls need to be thin and pliable, and there is also a need for a reasonable size match between the two vessel walls and the rings. Thick-walled vessels also reduce the internal lumen diameter unfavorably.

Conclusion

For beginners in the art of performing microvascular anastomoses; it is safe and will get excellent results regarding patency and superior results regarding time to perform the anastomosis using MAC couplers. However, have drawbacks among these are difficulties in everting the vessel ends, and in particular thick-walled arteries, over the MAC rings. Large mismatches in vessel diameter can also complicate the anastomosis.

RS11

An overview of the array of materials used for "CRANIOPLASTIES" with our experience of using preformed polymethylmethacrylate (acrylic) on a case series of 15 patients

Ankit Khasgiwala, Vilas Newaskar, Deepak Agrawal

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Abstract

Cranioplasty is the surgical repair of skull defects. It is carried out to achieve morphological and functional rehabilitation of the cranial vault affected with a severe bony defect resulting from trauma, infection, tumour or cerebral decompression procedure. Grant and Norcross in 1939 stated 5 indications for repair of such defect out of which visibility or esthetics and protection of cranial contents seem to be most important. There are several materials being used for cranioplasty like autogenous bone, metals-titanium, porous polyethylene, silastics, calcium phosphate cements, hydroxyapetite, acrylic and many more. Amongst these materials preformed polymethylmethacrylate (PMMA—acrylic) is the material frequently used at our institution (Dept of Oral and Maxillofacial Surgery, Govt Dental College, Indore). This inert, inexpensive material meets up for almost all of the requirements of an ideal cranioplasty material (except for osteogenic potential; which can be judiciously dealt up with). Unfortunately its efficacy has been questioned by some authors in litreture. This paper deals with putting up an ideal way of performing cranioplasty and gives an answer to the questions raised on PMMA (acrylic), enlightening its efficacy as an excellent cranioplasty material and proving it to be the most cost effective and limited donor site morbidity option, if placed obeying the protocols laid here. This paper also highlights the absolute and relative advantages and disadvantages of various other materials used for cranioplasty.

RS12

Facial Reanimation with cross facial nerve graft in post traumatic facial palsy

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Abstract

Objective

To study the efficacy and timing of recovery of facial palsy following reanimation with cross facial nerve graft.

Methodology

Patients with facial palsy and who presented to us within 8 months of injury were included in the study. 4 patients were reanimated with 2 sural nerve grafts from the contralateral facial nerve. Electric nerve stimulation of the affected side was started one month after surgery. Patients were assessed periodically (every month) for the onset and progress of Tinel's sign and facial muscle contraction of the affected side. Results and conclusion: On clinical evaluation the onset of Tinel's sign was observed at 3 months. Facial muscle contracture was noted 6 months after surgery. However recovery was slower in patients for who cross facial nerve graft was done later than 8 months after injury.

RS13
An Overview of Reconstruction of Mandibular Defects

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Abstract
Esthetic and functional reconstruction of continuity defects of the mandible is still a daunting challenge in the field of reconstruction surgery. The radical resection required for local-regional control of head and neck tumors has the capacity to disfigure and limit the patients quality of life. Techniques utilizing metal reconstruction plates, free autogenous bone grafts, heterografts, xenografts and bone substitutes have been utilized and still remain a viable options. However number of problems have been encountered with autogenous bone grafting cases with compromised blood supply resulting in from radiotherapy or in cases with extensive defects which include complications such as infection and graft resorption. Regional flaps revolutionized reconstructive surgery in the 1970 s and 1980 s. Pectoralis major myocutaneous flap is a versatile flap as it can not only provide skin and mucosa cover simultaneously but also provide adequate bulk for through and through defects. It does not cause any hindrance in mandibular movements. Introduction of microvascular surgery in last two decades has caused philosophical shift in contemporary head and neck reconstruction. Factors that decide the reconstruction option are, location and extent of the defect, condition of the patient, disease prognosis, surgical expertize and facilities available. This paper aims to present clinical cases, utilizing the reconstruction with reconstruction plate, reconstruction plate with autogenous bone, PMMC flap and free fibula flap for oromandibular reconstruction performed in the department of Oral & Maxillofacial surgery, MNR Dental College & Hospital and discuss the viability and value of techniques.

RS 14
Congenital Unilateral Maxillomandibulo-Zygomatic Fusion (Syngnathia): A Case Report

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Abstract
Background
Congenital fusion of the maxilla and mandible is rare, and cases can be classified by the nature of the connecting tissue, which may be either by synechiae (those involving the soft tissue) or by syngnathia (those involving the bone). Cases of congenital synechiae with soft tissue have been generally reported in literature, but congenital syngnathia with hard tissue is rare. congenital syngnathia that is not associated with systemic syndrome or maxillofacial defect is rarely found in literature, congenital fusion of the jaws is more commonly found in syndromes such as Van der Woude, cleft palate lateral alveolar synechiae syndrome, or in association with other defects and anomalies.
Objective
The authors report a case of a 25-year-old Female with congenital syngnathia, Results:On the basis of clinical and radiological findings a diagnosis of Dawson type 1 and Laster type 2A syngnathia was given as there was bony fusion of the mandible to the zygomatic complex causing only mandibular micrognathia without any congenital abnormalities in the head and neck such as clefts, aglossia or TMJ ankylosis. Left side was diagnosed as fibrous fusion of upper and lower arches (synechiae).
Conclusion
Syngnathia without any associated systemic or intraoral anomaly, as in our case report, is an extremely rare entity,

RS 15
Utility of ex-vivo molded acrylic cranioplasty, grafting and rotation flaps for skull and scalp reconstruction

Priyadrashini Bhanot

Abstract
Aims and Objectives
To make a cost-effective protocol for management of scalp and skull lesions considering the socioeconomic factors.
Materials and Methods
Patients with diverse etiologies such as skull and scalp Primary tumors, Skull metastasis, arterio-venous malformations, post traumatic defects and congenital defects were included in this study.
Results
In all patients, it was possible to reconstruct the skull using ex-vivo molded acrylic cranioplasty. Scalp was reconstructed using skin grafting with or without rotation flaps. This new technique of reconstruction is cost effective, gives excellent cosmetic results, can be used in diverse etiologies and is well tolerated.

RS 16
Maxillofacial Reconstructive Maze:Which Route To Take?

Swapan Kumar Majumdar

R. Ahmed Dental College and Hospital

Abstract
Defects, deformities and wounds in the oral and craniomaxillofacial region occur mostly as a result of either ablative surgeries or trauma. Literature is sprawled with numerous options for reconstruction. Each defect is unique and demands reconstruction suitable forthe size, age of the patient, systemic status, location of the defect, operator skill and infrastructure of the institute. Reconstructive options range from skin grafts, local flaps like rotational, transpositional etc; Locoregional flaps like tongue flap, nasolabial etc; Regional flaps like Pectoralis major myocutaneous flap and deltopectoral flap, and lastly distant flaps like free flaps. To choose from such varied options is very difficult and the correct choice determines the success of the reconstruction. Hence this paper focuses on decision making to

choose the appropriate flap based on the factors mentioned above. Situationbased deviation from the conventional order of the reconstructive ladder will be discussed and emphasized upon.

TMJ disorders and surgery (code- TM)

TM1
Anchored disc phenomenon- clinical diagnosis and magnetic resonance imaging correlation

Mohammad Faisal, Syed Ansar Ahmad

Jamia Millia Islamia

Abstract
Background
Anchored disc phenomenon as defined by Nitzan et al is characterized by sudden, severe and persistent limited mouth opening ranging from 10 to 30 mm (considerably lower than in disc displacement without reduction) and deviation of the mandibular midline toward the affected side. History of clicking is not obligatory. Although pain does not usually occur in the TMJ on loading, forced mouth opening evokes pain in the affected joint.
Methods
In cases of anchored disc reported by Nitzan et al, the disc position being more normal or slightly anterior led to the sudden severe limited mouth opening. In our study of 15 patients with clinical findings of an anchored disc all had an anteriorly placed disc and also reported similar clinical sign and symptoms as reported by NITZAN. There was correlation b/w clinical and the magnetic resonance imaging findings. However MRI scans of three temporomandibular disorder patients revealed an anchored disc with a more or less normal mouth opening (deviation from Nitzan cases). In these cases condyle translated over the anteriorly stuck disc and hence the oral opening was normal. The deformed disc acted as a cushion to the condyle to translate beyond the articular eminence. Our study is in consistent with other studies of Campos et al (2008), Kaneyama et al. (2007), who report an anchored disc phenomenon with normal condylar translation and normal mouth opening.
Conclusion
Anchored disc phenomenon should be defined and diagnosed clinically and also with reference to the disc position as seen on a magnetic resonance imaging scan

TM2
Vestibular Schwannoma Mimicking Temporomandibular Disorder: A Case Report

Ashok Kumar, Sunil Goyal

Army

Abstract
Introduction
Vestibular Schwannoma defines a benign tumor of the Schwann cell neurilemma, which grows mostly in the lower vestibular nerve of the 8th cranial nerve. Vestibular Schwannoma can mimick Temporomandibular Disorders (TMD) as its otologic and neurologic signs and symptoms are similar to Temporomandibular Disorders. We present a case of Vestibular Schwannoma mimicking Temporomandibular Disorders (TMD) and diagnosed correctly after MRI. Case report 38 years old male reported pain in left preauricular region since one year. He was treated at various centers by dental and medical practitioners but did not get relief. Pain was intermittent and of moderate intensity with gradual increase in intensity during evening, more while chewing, radiating to left temporal and parietal region. TMJ examination was WNL. ENT evaluation showed asymmetrical sensorineural hearing loss in left ear predominantly involving high frequency sounds. MRI Brian showed a left cerebro pontine angle mass measuring 34 mm × 27 mm which was hypointense on T1 W and Hyperintense on T2 W sequence.
Discussion
Vestibular schwannomas are characterized by the slow progression of hearing loss with or without balance loss. This happens because these tumors grow slowly, causing a gradual decrease in labyrinth stimulation, that the central compensation mechanisms are able to reduce the impact of these symptoms. The most frequent clinical symptoms of vestibular schwannoma are disturbances of the acoustic (95 %), vestibular (61 %), trigeminal (9 %), and facial (6 %) nerves. Facial pain caused by tumors may be misdiagnosed or wrongly interpreted in some cases. Moreover many a time the patients and also the doctor place little value to these symptoms, because they are not very intense and non-debilitating and because they ignore the need for more specific treatment.

TM3
Condylar reconstruction in TMJ ankylosis with coronoid process

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King George Medical University Lucknow

Abstract
TMJ ankylosis is very distressing structural condition that alters the patients eating habits and speech ability, leads to facial disfigurement and psychological stress.
Objectives
Evaluation of the success of coronoid bone graft TMJ ankylosis.
Methods
Twenty patients of TMJ ankylosis were selected from the out patience Department of Oral and Maxillofacial Surgery. Age group was 14–21 years of age, pateints were clinically and radio graphically evaluated prior to surgery. Standard Alkayat and Bramly incision was used for gap arthoplasty and coroiodectomy. The coronoid process was shaped and was fixed on the condylar stump with the help of L shaped Titanium mini plate. While doing fixation IMF was done with the help of elastic to ensure position of graft in the glenoid fossa. Temporal fascia was used as interposition material. Evaluation was done on the basis of post operative pain, swelling, infection, mouth opening, occlusion, paraesthesia, deviation of jaw and frontal and lateral profile pictures.
Findings
Findings of this study showed significant change in mouth opening, 95 % had no infection and 20 % had rearranged occlusion, improving paraeshesia was found in 45 %. Notable amount of bony resorption was found coronoid process.
Conclusions
The coronoid process in patients with TMJ ankylosis is longer and thicker thus it can provide enough length for condylar and ramus reconstruction as well as can withstand normal biting force

TM4
Review of various treatment modalities in TM Joint Disorders and Diseases: A Twenty Years Experience

S K Roy Chowdhury

Armed Forces Medical College

Abstract
Temporomandibular joint disorder (TMD) is a collective term used for a number of clinical problems that involve the masticatory muscle, temporomandibular joint and /or associated structures. It is an extremely common disorder that has emerged as one of the most intriguing challenges to the physicians. The etiology has been attributed to various factors ranging from inflammation, trauma, congenital or developmental, infection and neoplastic diseases. The most important feature of TMD is pain for which the patient seeks treatment. Other common findings include restricted range of mandibular movement or uncoordinated movements or joints movement characterized by clicking or grating sounds. Treatment goals for TMD are to control pain and to return mandibular motion and function to normal or as close to normal as possible. Treatment protocol may range from non invasive to surgical therapies. The non invasive modalities begin from patient education and self care and range from passive modalities (heat and cold therapy, ultrasound, laser and transcutaneous electrical nerve stimulation); range-of-motion exercises (active and passive); posture therapy; intraoral appliances and occlusal therapy; passive stretching; physical therapy modalities (e.g. iontophoresis, phonophoresis), psychological therapies (e.g. cognitive behavior therapy), relaxation techniques (e.g. Relaxation therapy, hypnosis and biofeedback, cognitive-behavioral therapy) and complementary therapies (e.g. acupuncture, hypnosis). The medical management comprises of use of NSAIDs, muscle relaxants, anti-anxiety drugs, antidepressants and more recently injections of botulinum toxin. Surgical modalities comprise of arthroscentesis, arthroscopic surgeries and open surgeries. However, no therapy has been shown to be uniformly superior for the treatment of pain or oral dysfunction. This article presents a review of various treatment modalities that have been employed for the management of TMD in last twenty years.

TM5
Clinical and MRI evaluation of Orthodontic mini screws for disc repositioning in Internal Derangement of TMJ: A prospective evaluation

Rajkumar K, P Mukhopadhyay, Ramen Sinha

Corps Dental Unit, c/o 56 APO

Abstract
Purpose
The purpose of this study was to assess the efficacy of Orthodontic mini screws as a modified suture anchor for disc repositioning in cases of Internal Derangement of the Temporomandibular Joint.

Patients and Methods
A prospective evaluation of ten patients was undertaken for a period of six months using this modified approach from Jan 2014 to Jun 2015. Symptomatic patients with Clinical and MRI features suggestive of Internal Derangement of TMJ and willing to undergo surgical repositioning of articular disc to alleviate symptoms of Temporomandibular dysfunction were taken up for the study. Postoperatively functional outcomes were assessed in terms of reduction in pain, joint movement and absence of joint noise and clicking sounds. Postoperative MRI was used to assess the disc position and morphological changes in the disc and arthritic changes in the condyle.
Results
All patients underwent a surgical repositioning of the anteriorly displaced disc by the modified orthodontic suture anchor. Patients were post surgically followed up at regular intervals of 1, 3 and 6 months. Immediate complications in terms of pain, restriction of functional motion and transient facial nerve palsy were noted. Late complications include temporal nerve palsy in one case. All patients experienced significant improvement with good functional outcomes and stable repositioning of disc was noticed at the end of six months.
Conclusions
The modified disc repositioning using an orthodontic screw via a mini preauricular approach provided a good functional outcome in all patients as assessed over a period of six months. However the long term functional sequel of the procedure and changes in the articular disc needs to be assessed.

TM6
Comprehensive management of bilateral recurrent TMJ Ankylosis—A Case report

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Abstract
Ankylosis of Temporo-mandibular joint TMJ with its subsequent mandibular hypomobility and facial deformity is a distressing disease from functional and esthetic point of view. Failure of the treatment leads to recurrence of ankylosis which leads to increase in severity the secondary dentofacial deformity.
Case report
This is case of 16 yrs old girl who was diagnosed as a case of bilateral recurrent TMJ ankylosis who had associated severe mandibular hypoplasia with OSA. The patient was managed comprehensively with the simultaneous release of the ankylosis with Osteoarthrectomy followed by interposition with dermis graft and bilateral distraction osteogenesis (DO) for the advancement of the mandible. An overall good functional and esthetically acceptable result was achieved with improvement in the symptoms of OSA.
Discussion
The treatment of ankylosis should be problem oriented especially in recurrent cases. It depends upon the age and extent of the secondary deformity associated with the ankylosis of TMJ. Simultaneous release of ankylosis and correction of the associated deformity should be done at earlier stage as per the indication of the case especially in potential OSA cases and growing individuals to maximize the benefit to these patients.

TM7

Comparative Study of Trigger Point Therapy With Local Anaesthetic (0.5 % Bupivacaine) Versus Combined Trigger Point Injection Therapy and Levosulpride In The Management of Myofascial Pain Syndrome In The Orofacial Region

Pranav Gupta

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Abstract

Aim

To compare the efficacy of combined local anesthetic injection with 0.5 % bupivacaine and levosulpride versus local anesthetic injection alone on outcome measures including levels of pain intensity and depression in the management of myofascial pain syndrome in orofacial region.

Patients and Methods

This was a prospective, randomized, controlled and open-label comparative clinical study. 74 Patients diagnosed to have myofascial pain syndrome and fulfilling the inclusion criteria were enrolled for the study. Patients were randomly assigned into 2 groups. Group A received local anesthetic injection (0.5 % bupivacaine) on trigger points and Group B received combined trigger point injection therapy and 50 mg of tablet Levosulpride per orally B. I.D. They were assessed for pain intensity and depression at baseline and at follow-up of 1, 4, 6 and 12 week intervals.

Results

The mean age of patients was 44.54 + 15.977 years in group A and 39.97 + 14.107 years in group B (P value = 0.2). The group A comprised of 25 females (67.567 %) and 12 males (32.432 %) while group B 27 females (75 %) and 9 males (25 %). 70.27 % were diagnosed with moderate depression in group A and 75 % in group B. 18.91 % in group A and 19.44 % in group B were diagnosed with severe depression. When the VAS score and BDI score was compared at the follow-up intervals with the baseline scores in both treatment groups; the mean difference was highly significant at all the follow-up intervals. However when the relative efficacies of two interventions were compared between the two groups, improvement in pain was significant at all the follow-up intervals except the 1st week follow-up whereas the improvement indepression was non-significant at 1st and 4th week interval while it was highly significant at 6th and 12th week interval.

Conclusion

The combined therapy with trigger point injection and levosulpride as antidepressant significantly reduces pain and depression in the study subjects suffering from chronic myofascial pain with moderate to severe depression in the orofacial region.

TM9

Is there a need to modify present treatment protocol of temporomandibular disorder in initial phase of therapy in the Indian scenario?

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Abstract

Backround

Patients suffering from pain and dysfunction in the temporomandibular region ignore appointments after the first examination or after first or second sessions of initial treatment. While they are still in need of further treatment. Dropout rate varies from 20 to 50 % in various studies. Unfortunately very few studies have investigated the dropout rate of these patients.

Objective

The present study was undertaken to find out the dropout rate among these kind of patients Methodology: A retrospective study was done from June 2008 to May 2015 by collecting the records of the patients who were diagnosed to have MPDS. Outcome variables included were age, sex, primary presenter, secondary presenter, distance travelled, occupation and education.

Results

The dropout rate was higher in secondary presenters and female dropout rate was more compared to males. Person who travelled long distance showed higher dropout rate. Graduate and middle age people were regular during follow up and person in job had a good follow up record as compared to businessmen and housewives.

Conclusion

This study has shown that dropout rate of treatment in temporomandibular joint disorder is affected by age, sex, distance travelled, occupation and education.

TM10

Gap arthroplasty in management of TMJ ankylosis (our experience)

Praveen Lone

IGGDC

Abstract

Temporo mandibular joint ankylosis is highly distressing & disfiguring condition in which TMJ is replaced by scar tissue. TMJ ankylosis is relatively common in developing countries especially in Asian population. The unfortunate patient experiences problem in food intake, speech, & maintaining oral hygiene due to limited mouth opening The purpose of this study is to present cases of unilateral ankylosis TMJ above 15 years treated by gap arthroplasty followed by vigorous physiotherapy with 7–8 years of follow up.

Methodology

Various methods have been used to manage TMJ ankylosis including gap arthroplasty, interpositional arthroplasty and joint reconstruction by bone grafts or joint prosthesis. Recent studies advocate distraction osteogenesis in management of TMJ ankylosis. Patients above 15 years of age with unilateral TMJ ankylosis were selected. Gap arthroplasty was done using pre auricular approach.vigorous post operative phsiotherapy was advised for 1 year.

Results

Follow up was done from 5 to 8 years interincisal distance was 3.5 cms in all cases, no recurrence was seen in any patient.

Conclusion

Gap arthroplasty may be an efficient procedur for TMJ ankylosis in achieving satisfactory post-operative inter-incisal opening and articular function. Early and meticulous rehabilitation is required to prevent relapse. Long-term follow up is recommended to document possible recurrence. The success in preventing reankylosis after gap arthroplasty is related to early postoperative physiotherapy.

TM12
Decompression of the meniscus by eminoplasty in the management of internal derangement of temporomandibular joint: our experience

Divye Malhotra

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Abstract
Background
Management of Internal derangement of TMJ is still controversial. Decompression of the meniscus can relieve symptoms and improve mouth opening in patients with internal derangement of TMJ. Decompression of the meniscus can be achieved by either high condylar shaving or by eminoplasty. Release of stress on the disc and innervated retrodiscal tissues occurs which allows proper and smooth movement of TMJ disc and condyle without hindering the meniscus in the gliding movement of the condyle.
Objective
We carried out this study to evaluate the efficacy of eminoplasty in relieving symptoms in patients with internal derangement of TMJ.
Patients and Methods
This study was conducted on ten patients suffering from unilateral internal derangement of TMJ. Following extensive routine conservative treatment all patients underwent further conservative treatment for at least three months before being treated surgically. We performed eminoplasty in ten patients with deep fossa.
Results
Following eminoplasty, there was improvement of pain, range of different mandibular movements and increased maximum interincisal opening in all the patients.
Conclusion
This technique in the management of internal derangement of TMJ significantly decreases pain level and increases interincisal opening and jaw function. The results are encouraging but require prospective studies on large number of patients.

TM13
Sodium hyaluronate versus normal saline arthrocentesis in management of temporomandibular joint internal derangements: a prospective comparative study

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Abstract
Background
Traditionally, temporomandibular joint (TMJ) internal derangement has been described as a progressive disorder. Agents used for TMJ arthrocentesis include normal saline, steroids etc. Recently, sodium hyaluronate (SH) has been proposed as an alternative therapeutic agent.
Objective
To evaluate the efficacy of arthrocentesis using normal saline with and without SH injection in patients with TMJ internal derangement.
Methodology
20 patients with chief complaints of limited mouth opening, TMJ pain and jaw deviation were randomly divided into 2 groups.Both groups consisted of patients with disc displacement with reduction and closed lock. In Group I, only arthrocentesis was performed. In Group II, arthrocentesis plus intra-articular injection of SH was performed. Clinical evaluation was done regularly for maximum mouth opening (MMO), TMJ pain and jaw deviation before and after arthrocentesis for 3 months.
Results
The mean visual analogue scale (VAS) score change was statistically significant in Group I and Group II for within the group analysis. There was statistically significant difference in VAS score between Group I and Group II at all time intervals postoperatively. Increase in MMO from preoperative to 3 months postoperatively was statistically significant for within the group analysis. There was no statistically significant difference in mean MMO between Group I and Group II at any given time during the study. There was reduction in mandibular deviation in both Group I and Group II but the difference was not statistically significant.
Conclusion
Arthrocentesis with SH is superior to arthrocentesis alone in treating patients suffering with TMJ internal derangement, who are refractory to conservative treatment.

TM14
Creating a mechanical obstacle in subluxation of TMJ

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Abstract
Subluxation of TMJ is one of the commonest problem where patients seek a comprehensive treatment as Muller & Murphy classified surgical treatment for chronic subluxation can be any one of the following procedures which depends on clinical situation. (1) Capsuloraphy & capsular tightining procedure (2) creating mechanical obstruction (3) removing mechanical obstruction (4) direct restraining of condyle (5) Creating new muscular balance. All these procedures are associated with various level of success in reviewing the literature.As Irby stated Eminectomy is the most succesful procedure. This paper highlights our experience in creating a new obstacle in chronic subluxation of TMJ. Various procedures like Dautery's, Gleino- condylar osteotomy, eminence plating are discussed with reviews.

TM16
Coronoid process and residual ankylotic mass for TMJ reconstruction in temporomandibular ankylosis

Apoorva Mowar

Subharti Dental College

Abstract
Ankylosis is stiffening or fixation of the joint. Management of Temporomandibular (TM) ankylosis is still a challenging procedure. Gap

arthroplasty alone results in poor occlusion and function. To overcome these problems, reconstruction of the joint with various autologous grafts like costochondral graft, strenoclavicular graft, metatarsal, coronoid process, reshaped ankylotic mass and even alloplastic materials have been utilized. The major goals associated with reconstruction of TMJ are improvement of mandibular form and function, reduction of disability, containment of excessive treatment, cost and prevention of further morbidity. Autogenous grafts like CCG and SCG are well established, but have their own disadvantages, which can be overcome when grafts are derived from local site. Alloplastic prosthesis has established popularity but has limitation of its use due to cost and availability, especially in developing countries. This presentation highlights and discusses the results, in terms of efficacy, long term fate of coronoid process and resected, reshaped ankylotic mass for reconstruction of the ramus condyle unit in TM ankylosis.

TM17
Condylar reconstruction by sliding vertical ramus osteotomy (SVRO) along with temporomyofascial flap (TMF) as interpositional material in patients of temporomandibular joint bony ankylosis

Balram Garg

Post Graduate Institute of Dental Sciences, Rohtak

Abstract

Aims and objective

To access the efficacy of sliding vertical osteotomy using the entire posterior border of the mandibular ramus for condylar reconstruction along with temporo-myofascial flap as an interpositional material in the patients of TMJ bony ankylosis.

Methods and materials

This retrospective study of bony TMJ ankylosis included 10 patients (eight unilateral and two bilateral) who were preoperatively assessed for a detailed history, physical and radiological examination and mouth-opening measurements. Postoperatively all the patients were clinically evaluated for the maximum mouth opening (MMO), postoperative complications, patient satisfaction and morphologic changes over the top of cut ramus radiographically. All the patients were followed up for the average periods of 18 month (12–24 month).

Results

The establishment of a passive opening of 30 mm was considered successful. In all of our patients, preoperative and postoperative maximal mouth opening (MMO) values at twelve months follow up (mean 3.8 mm and 36.5 mm respectively) were remarkably different and satisfactory results were achieved. Radiographically complete union of graft with ramus, remodelling of top of ramus to the shape of condyle with increase in ramal height and regenerating coronoid process was observed on panoramic radiography and CT scan after one year. No major complication was encountered except one patient had transient facial palsy.

Conclusion

After release of TMJ bony ankylosis, reconstruction of ramal height with posterior border of the mandibular ramus using SVRO combined with TMF as interpositional lining seems to be an alternative and promising method in management of TMJ bony ankylosis. However, further studies with longer follow-up and large samples are required to confirm its efficacy and growth potential in developing individuals.

TM18
Old but not Archaic—Sternoclavicular joint graft in post ankylosis surgery reconstruction

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Abstract

Background

TMJ ankylosis surgeries are always been debated since many decades. With the recent developments of single vs two stage surgeries coupled with distraction osteogenesis, cosmetic camouflages, the functional goals go unnoticed.

Objective

Therefore this particular study aims to achieve the basic functional goals along with possible esthetic corrections with the structurally similar Sternoclavicular joint graft reconstruction after gap arthroplasty.

Methodology

Unilateral or bilateral TMJ ankylosis in patients above 4 years. Gap arthroplasty and reconsruction with Sternoclavicular joint graft. Functional assessment and cbct assisted evaluation of graft after one year.

Results

A total of 15 TMJ reconstructed and followed up for 3 years with promising results.

Conclusion

In the presence of many reconstructive options after gap arthroplasty in TMJ ankylosis, the Sternoclavicular joint does show its significance in achieving the goals in the treatment of ankylosis.

TM19
'TMJ Dysfunction – An Enigma'

Abhinav Hire

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Abstract

Treatment of TMJ dysfunction ranges from simple conservative measures like physiotherapy and USG to more aggressive TMJ surgeries (procedures) like Arthroscopy, Disc surgeries to total joint replacement. Diagnosis and treatment plan of such patients has always proven to be a tough task for clinicians. This paper deals with simplifying diagnosis and also various treatment modalities for such TMJ dysfunction along with the indications and possible complications.

Others (code-O)

O1

Improving the quality of oral and maxillofacial surgical notes in an Indian Public Sector Hospital in accordance with the Royal College of Surgeons Guidelines: a completed audit loop study

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Dept of Dentistry, Jawaharlal Institute of Postgraduate Medical Education and Research

Abstract

Background

Proper and adequate documentation in operation notes is a basic tool of clinical practice with medical and legal implications.

Objective

An audit was done to ascertain if oral and maxillofacial surgery operative notes in an Indian public sector hospital adhered to the guidelines published by the Royal College of Surgeons England.

Methodology

50 randomly selected operative notes were evaluated against the guidelines by RCS England with regards to the essential generic components of an operation note. Additional criteria relevant to oral and Maxillofacial Surgery were also evaluated. Changes were introduced in the form of Oral and Maxillofacial Surgery specific consent forms, diagram sheets and a computerized operation note proforma containing all essential and additional criteria along with prefilled template of operative findings. Re-audit of 50 randomly selected operation notes was performed after a 6 month period.

Results

In the 1st audit cycle, excellent documentation ranging from 94 % to 100 % was seen in 9 essential criteria. Unsatisfactory documentation was observed in criteria like assistant name, date of surgery. Most consent forms contained abbreviations and some did not provide all details. Additional criteria specific to Oral and Maxillofacial Surgery scored poorly. In the 2nd Audit for loop completion, excellent documentation was seen in almost all essential and additional criteria. Mean percentage of data point inclusion improved from 84.6 % to 98.4 % ($0.001 < P\text{-value} < 0.005$). The use of abbreviations was seen in only 6 notes.

Conclusion

Regular audits are now considered a mandatory quality improvement process that seeks to improve patient care and outcomes. To the best of our knowledge, this is the first completed audit on operation notes documentation in Oral and Maxillofacial Surgery from India. The introduction of a computerized operation note proforma showed excellent improvement in operation note documentation. Surgeons can follow the RCS Guidelines to ensure standardization of operation notes.

O2

Accelerated Osteogenic Orthodontics (Aoo): A Prospective Control Study of Corticotomy Versus Fiberotomy Assisted Orthodontic Tooth Movement

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Abstract

Background and Objectives

Rapid orthodontics is a desired treatment modality for malocclusion. Accelerated Osteogenic Orthodontics (AOO) enhances the tooth movement by elevating the rate of remodeling of alveolar bone and periodontal and gingival tissues. The two methods for completing the treatment in a shorter period are through Corticotomy and Fiberotomy. This study is done to find if similarities or any differences exist between Fiberotomy and Corticotomy.

Methodology

Patients were grouped randomly in 3 groups. Group A (Corticotomy), Group B (Fiberotomy) and Group C (Conventional Orthodontics). Sample size was 30 patients (10 patients in each group). Post-operative swelling and pain were evaluated by visual analogue scale (VAS). Follow up was 4–6 months. Rate of retraction was measured using dental casts. Pre-operative and post-operative radiographs were taken to evaluate root resorption. Vitality test of upper and lower anterior teeth were done.

Results

Statistically significant difference ($p < 0.05$) was seen in rate of retraction. Extraction space closure occurred in 4 months in Group A, compared to Group B and Group C which took more than 6 months. Rate of retraction was faster in Group B as compared to Group C. On comparing the post-operative swelling in Group A and Group B, statistically significant difference was found from pre-operative to immediate post-operative day, and from pre-operative to post-operative third day. No effect on tooth vitality and no significant root resorption were noted. No statistically significant difference was seen in VAS mean scores of Group A and Group B.

Conclusion

Rate of retraction was faster in Corticotomy as compared to fiberotomy and conventional orthodontics. Reported pain levels were same for Corticotomy and Fiberotomy. Corticotomy was found to be a safe procedure leading to no significant root resorption of the teeth, but resulted in more post-operative swelling as compared to fiberotomy.

O3

Submento-submandibular intubation; An Adjunct in orthognathic surgery?

Ashish Chakranarayan, Jyoti Joshi, Gagan Deep Kochar, M Viswambaran

Military Dental Centre, Jabalpur

Abstract

Background

The submento-submandibular intubation technique has been used in facial trauma cases where there is a requirement of addressing the facial fracture requiring intraoperative verification of occlusal relationship and also addressing the nasal fractures. However the utility of this technique in orthognathic surgery cases has not been reported as much.

Aim

To assess the efficacy of Submento-submandibular intubation as an adjunct in orthognathic surgery

Methods

Submento submental intubation was carried out in three cases using the technique as advocated by Green and Moore.

Results

Clinically favourable results were obtained with the use of the technique in the specific cases undergoing anterior maxillary osteotomy.

Conclusion

Submento-submandibular intubation may be an important adjunct in cases undergoing anterior maxillary osteotomy.

O4

Indigenously Design and Development of Silicone based Cartilage like (Ear, Nose, Eye, orbital) Implants, for cranio-facial reconstruction

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Avinash Dental Laboratory & Research Institute Pvt. Ltd. in colaboration with Calcutta University

Abstract

Background

Trauma (road traffic accidents, burns, and occupational accidents, bullet injuries), head and neck cancer, and congenital defects are the most common reasons for full or partial loss of an eye, ear, nose, jawbone, or other head and neck structures. Facial prosthetics and implants can be a life-changing milestone for patients who have lost an eye, ear, nose or sustained damage to facial (Both extra-0ral & intraoral) structures.

Objectives

We developed cartilage like bio-active implantable bio-materials to reconstruct the loss facial tissue with minimum morbidity. Already developed one are tested for it's biocompatibility. It passes in-vitro analysis which provide the scientific basis of it.

Material & method

Different combination with different percentage of biologically active materials like Calcium hydroxyl appetite, Bio-glass, Titanium oxide and bio-inert materials like silicone, polyethylene, and biologically resorbable materials like magnesium oxide, biologically resorbable polymers are trying in different formula developed by permutation and combination basis. Biocompatibility and cyto-toxicity are also an important area which are already assessed successfully.

Discussion

Animal study and other biomaterial test shows the efficacy of the newly developed biomaterials. As cartilage like biomaterials are not available in the world market, the newly developed one has tremendous value. Bio-integration is the ideal outcome expected of an artificial implantable material. It implies that the phenomena that occur at the interface between the implant and host tissues where it does not induce any Deleterious /harmful effects or reaction such as chronic inflammatory response or formation of unusual tissues barrier / Protective Capsule. Hence, it is of paramount importance to find out biomaterials in such a way, so that the graft materials or an implant produces such an environment, where body tissue reacts favourably (Tissue ingrowths) towards the implanted materials. Biologically active materials are the choice today.

Conclusion

The new development helps in producing a near-normal appearance of the affected person and this development can be a milestone step in the field of biomaterial world.

O5

Tooth pain management of chronic pulpitis in a patient with toxic epidermal necrolysis—A Case Report

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Abstract

Toxic epidermal necrolysis (TEN) is acute life threatening mucocutaneous reactions due to various drugs. Oxicam NSAIDs, Acetic acid NSAIDs (eg: diclofenac), aminopenicillins and Cephalosporins are lower risk group of drugs that cause epidermal necrolysis. Protocol for medication is early recognition and withdrawal of the offending drugs and supportive care. Healing of extracted socket and mucosa is compromised due to various factors of toxic epidermal necrolysis. Impaired alimentation, photophobia and painful micturition and malabsorption cause impaired wound healing. This case study discuss about interventions to manage odontogenic pain in a patient with TEN.

O7

A Rare Case Report of Eagles Syndrome complicated with chronic mouth opening, its management and complete rehabilitation; Dental Perspective

Andrews Navin Kumar, Gaurav Dua, Bhushan Kumar

200 Military Dental Centre

Abstract

Background

Eagles syndrome is a rare condition of either elongated styloid process or ossification of its ligaments; which is less appreciated and often ignored condition by clinicians because of its vague symptoms which can be easily confused with other oral or paraoral conditions presenting with similar signs & symptoms. Since it is not a routine clinical problem, it is not given the first priority thought while diagnosing such a case; especially in the absence of sound clinical knowledge and good radiographs.

Objective

This article is aimed to summarize unusual clinical presentations, diagnosis and standardized tonsil-sparing trans-oral surgical approach for Eagles Syndrome case and its unique post operative management.

Methodology

A 80 years old female patient presented with the tendency of uncontrolled wide mouth opening with severe pain in both ears, temporal region; submandibular area extending up to back of neck with intensity on right side. The patient was diagnosed as a case of the eagles syndrome with a unique finding of pain relief on wide mouth opening. The patient was operated for bilateral styloidectomy followed by post surgical rehabilitation with custom made chin cup appliance and mouth opening exercises.

Result

A complete resolution of symptoms and marked improvement in patients condition was noted post styloidectomy procedure.

O8

Role of propranolol in ulcerated haemangioma of head and neck: A prospective comparative study

Preeti Tiwari, Ajay Narayan Gangopadhyay, Shiv Prasad Sharma, Vaibhav Pandey

Institute of Medical Sciences, IMS, BHU

Abstract

Introduction

We performed a prospective comparative study (Propranolol vs. Non-Steroidal anti inflammatory drugs) to evaluate the therapeutic response, tolerance propranolol in infants with ulcerated infantile haemangioma of head & neck region.

Material and methods
This Prospective randomised study conducted during March 2011 to April 2014 after approval from institutional ethical committee. 74 patients were randomly divided into Group A & B, Group A patients were given oral Propranolol at a dose of 2 mg/kg per day in 3 divided doses and Group B patients were given oral Ibuprofen and paracetamol in doses 10 mg/kg and 16.2 mg/kg 8 hourly. The Children's Hospital of Eastern Ontario Pain Scale (CHEOPS) was used to measure pain on 2nd and 5th day after commencement of treatment in both groups. Response to Propranolol was classified as Complete Response, Partial Response and Non Responder
Results
Mean value of pain score on 5th day in Group A was 7.50Â±1.07 and in group B was 7.17Â±0.81 (*P* value 0.074). There was no difference in pain score between the two groups. Mean duration of healing of ulceration 17.93Â±2.22 days and in Group B was 27.71Â±2.33 days (*P* value <0.001). In Group A out of 28 patients 8 (28.5 %) were complete responders, 16 (57.1 %) were Partial responders and 4 (14.2 %) were Non-responders. In Group B out of 24 patients 3 (12.5 %) Complete responders, 9 (37.5 %) were partial responders and 12 (50 %) were Non-responders.
Conclusion
Propranolol is a valuable therapeutic alternative for treatment of ulcerated haemangiomas.

O9
Rare case of primary tubercular osteomyelitis of mandible

Sajjad Abdur Rahman

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Abstract
Background
Odontogenic infection are quite common in daily clinical practice in dentistry. The causes of these infections are usually decayed tooth, pericoronitis or periodontal infection. Hence suspecting the cause as tubercular infection is usually uncommon especially because tubercular osteomyelitis of mandible accounts for less than 2 % of all skeletal TB.
Objective
To stress on the fact that in nonresponding cases of odontogenic infection rare causes like tubercular infection should be kept in diagnosis.
Methodology
A 35 year old female of Indian origin attended our clinic with complains of pain, swelling of lower jaw and difficulty in mouth opening since 1.5 months. Her clinical examination suggested submasseteric space infection resulting from periodontitis of teeth of lower jaw. Radiological investigation revealed lytic lesion in the right ramus of mandible and diagnosis was modified as osteomyelitis of ramus of mandible. Surgery was done and lot of granulation tissue was removed and area debrided and cleaned. Extraction of molars of same side was also done. Regular iodoform dressing was started. But the condition of patient was not improving as expected. Culture and sensitivity report suggested citrobactor species and appropriate antibiotics were started. Further when histopathology report came it suggested tuberculosis. X-ray chest was advised and it was found to be normal. Hence a diagnosis of primary tuberculosis was made and patient was started on standard antitubercular drugs. Upon administration of ATT patient improved considerably.
Result
8 months of followup shows good bone healing and patient is symptom free.
Conclusion
Odontogenic infections which are not responding to routine standard treatment, rare causes should be suspected and ruled out. It will avoid further serious progression of disease.

O10
"I have quality of life……''Support needs and quality of life in Head& neck cancer (Oral) Survivors

Mounabati Mohapatra

All India Institute of Medical Sciences, Bhubaneswar

Abstract
Abstract Major share of death today, goes to cancer death. Head and neck cancer in India accounts 30 % of all cancers. Annually about 1.3 lakhs people dyeing due to oral cancer. There are four pillars for head and neck cancer out of which treatment with rehabilitation is important and necessary to provide a good quality of life to cancer survivor. The face and mouth are the central and exposed part of an individual for not only for communication but also appearance, speech, mastication and swallowing. Treatment of head and neck cancer causes disfiguring disruption of the core aspect of life. Surgical management of oral cavity Midface and cutaneous cancer of head and neck greatly affects the quality of life of a cancer survivor. Areas which alter the quality of life are body image, speech, mastication, swallowing and psychosocial aspect of life. Today five year survival rate increase up to 50 %. Therefore all cancer survivors now need better care and support to have a good quality of life which starts from the day of diagnosis till the end of life. This presentation will highlight the different field of supportive care needs for oral cancer patients to have a good quality of a life.

O11
'Better surgeons-safer patients'. Need for surgical patients

Kavita Raghotham

YMT Dental College and Hospital

Abstract
Background
Surgical audit is a systematic, critical analysis of the quality of surgical care that is reviewed by peers against explicit criteria or established standards, and then used to inform and improve surgical practice with the ultimate goal of improving the quality of care for patients.
Objective and aims
To assess the current scenario and evaluate whether the desired expected standards have been met. The lessons learnt from this would enable better patient care and would aid in improving oneself.
Aims
To identify ways of improving patient care, help surgeons utilise the best surgical resources available. This audit will aim at development of professional education and self regulation. The aim is also to improve accountability and probably make it a stimulus for research.

Methodology
A survey was carried out in many centres where maxillofacial surgeries are conducted. Questionnaires were handed out and an online survey is being conducted. Results will be tabulated once the survey is completed. Results will be discussed once the survey is completed (last week of August).
Conclusion
Promotion of an audit culture is essential and should be considered as normal practice. Audit can lead us to make necessary changes and implement them in our practice, however it cannot suggest us the methods to employ.

O12
Predicaments In Pediatric Maxillofacial Patient

Lakshmi Shetty

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Abstract
Pediatric maxillofacial patient have been a challenge for oral and maxillofacial surgeon in terms of clinical presentation. The perioperative management of a pediatric patient for surgical treatment and the drug interactions may bring in catch 22 situation for the surgeon. The knowledge of the anatomy, physiological changes, and medical challenges is of utmost importance to the oral and maxillofacial surgeon in his or her ability to manage this patient population. The provision of oral and maxillofacial surgery care presents unique challenges and opportunities. The unique anatomy, response to trauma, disease, with a component of growth and development place the oral and maxillofacial surgeon to a rainbow of treatment proposals. The pediatric oral and maxillofacial patient have a broad range of surgical needs from exodontia, pathology, infection, Temperomandibular surgery, maxillofacial trauma, neck masses, orthognathic surgery. Sedation to general anesthesia is one more interesting area of thought. The various predicaments in pediatric maxillofacial surgery can be addressed with timely surgical and therapeutic management to ensure pediatric health and wellbeing. The whole rainbow of physiological changes in a pediatric patient puts the surgeon in a catch 22 situation. This is an extensive review describing the challenges for the maxillofacial surgeon in treating the pediatric patient and the various ways to answer the surgeon's dilemma.

O13
Fat vs Fillers for facial rejuvenation

Beena Roopak

Rajarajeshwari Dental College and Hospital

Abstract
Background
The volume that is lost as the patient ages occurs over the entire face, not concentrated to individual lines or wrinkles. Physicians need to take a global approach to rejuvenation instead of a focal one. An ideal approach to total facial rejuvenation would be to address the whole face, an endeavor for which synthetic fillers may fall short. Synthetic fillers is an easy procedure to learn and an easy one to perform. In contrast, fat grafting requires a little bit of surgical skill and time.
Materials and Methods
We report six cases who presented with a varied range of loss of volume in the face due to aging or due to trauma. We used fillers in 3 patients and abdominal fat grafts in 3 patients.
Results
In all cases, the planned results was achieved without any immediate or delayed complications and with better esthetic outcomes.
Conclusion
Thus, a through knowledge is required in selection of cases which is good for fillers and which one for fat grafts, As both have their own advantages and disadvantages. In patient who has lost just a bit of volume can be replaced with filler temporarily. However, patients who exhibit more significant volume loss, fat grafting is often the ideal treatment approach. This paper is presented to discuss our experience of both the procedures.

O14
Eagles Syndrome: A Modified Transoral Surgical Approach For Resecting Completely Ossified Stylohyoid Ligament

Sandeep Garg

Gian Sagar Dental College and Hospital

Abstract
Eagles syndrome, also known as elongated styloid process, is a condition that may be a source of craniofacial and cervical pain. It is known to occur when either the total length of the styloid process is longer than 25 mm or when stylohyoid or stylomandibular ligaments are ossified. Its incidence has been reported variably in literature. The symptoms related to Eagles syndrome can be confused with those attributed to a wide variety of facial neuralgias and/or oral, dental and TMJ diseases but adequate history, proper clinical and radiological examination and sound knowledge of mimicking pathology can help in diagnosing the disease. The purpose of this paper is to discuss the current diagnosis of Eagles syndrome, morphologic characteristics of styloid process and to discuss a modified and a much simpler surgical technique for styloidectomy using transoral approach. Considering its ease to perform, minimum dissection requirement, avoidance of an extraoral scar with minimal risk to vital structures dictates that this approach can be practiced much safely in patients with elongated styloid process or completely ossified stylohyoid ligament.

O15
Do people know us?

Atul Sharma, Nageshwar Iyer, Ramesh Ram Fry, Jaitender Pal Singh

MM College of Dental Sciences & Research, Mullana, Ambala

Abstract
The scope of oral and maxillofacial surgery (OMFS) has increased vastly as compared to earlier years. Currently apart from dentoalveolar surgery & basic maxillofacial trauma, OMF surgeons in India treat plethora of afflictions effecting the maxillofacial region like benign and malignant pathologies of head and neck, cleft lip and palate, other facial deformities & TMJ disorders to name a few. In spite of all these advances our specialty is still vaguely or sparsely understood by both the dental and medical fraternities. Patients regularly present to their dentists or emergency departments with abnormalities that require the expertise of specialists in OMFS. Our medical and dental colleagues need to have the necessary knowledge to make informed decisions about their patients management. We therefore conducted a study to check the awareness about OMFS in

some north Indian universities. Study was done along with AOMSI Face Itcampaign, students and faculty were given a proforma to be filled before the presentation. Proforma was filled by more than 10,000 respondents (which included both faculty and students from engineering, medical, dental, nursing, physiotherapy, pharmacy, management, hotel management, law, humanities, science and commerce departments). Study revealed lack of understanding about oral & maxillofacial surgery not only in non medicos but even in health care professionals. It was concluded that there is lot to be done by us as OMF surgeons to spread the awareness about our speciality and programs like Face it campaign will serve a very important role in giving our profession the recognition it really deserves.

O16
To Evaluate The Utility of Rapid Prototype Models In Oral and Maxillofacial Surgery

Jitendra Chawla, Prashant Pandilwar, Abhay Datarkar

Government Dental College and Hospital Nagpur

Abstract
Aim
To evaluate the utility of rapid prototype models in oral and maxillofacial surgery.
Methodology
Patients with dentofacial deformities, maxillofacial defects, tooth autotransplantation and dental implants patients were planned preoperatively using virtual surgical planning tools, rapid prototype models and customized surgical guides for proper osteotomy cuts, pin positioning, contouring reconstruction plates, socket modification and guiding proper direction of dental implant ostetomy sites. Operating time, surgeons comfort and convenience, tissue manipulation and postoperative results were evaluated intraoperatively and postoperatively.
Results
Surgical operating time and intraoperative tissue manipulation was significantly reduced with increase in surgeons comfort and better post operative results.
Conclusion
Virtual surgical planning, rapid prototype models and customised surgical guides allows understanding the detailed anatomy, intraoperative difficulties and visualisation of postoperative outcome in planning phase of surgery thus ultimately improving the postoperative results.

O17
Is The Small—Small? A Volumetric & Dimensional Study of The Orbit In South Indian Population

V. Suresh, Selva Seetharaman, K. Sridhar

SRM Institutes For Medical Science

Abstract
Aim of the Study
To have a standardized volume and dimensions of the orbit in South Indian population to prognosticate the discrepancy of the defect.
Materials & methods
The orbital measurements were calculated from HRCT with 0.6 mm cuts of 99 people (198 orbits) which included 70 males and 29 females between 16 to 90 years of age. The volume was measured the various measurements calculated by the manual painting method were orbital volume and dimensions of the orbital cavity, location of infraorbital canal & nerve and the volume of orbital fat.
Results & Conclusion
With no major study on Indian population, especially for secondary deformities, this study helps us to standardize the orbital measurements in South Indian population. The measurements of various orbital parameters, could help determine the need for orbital surgery in trauma patients and also if are grafts required or not to correct the discrepancy.

O19
Current protocol for basic life support

Muralee Mohan Choontharu

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Abstract
Understanding basic life support guidelines is very much essential for every health personnel. These guidelines are changed once in 5 years. The critical part of basic life support training is understanding and properly adhering to basic life support algorithm. An effort is made to give more insight into the latest 2015 BLS guidelines.

O21
Fungal infections of paranasal sinuses a study

Harish Saluja

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Abstract
Fungal infections are common in several conditions that lower the immunity of the patient like uncontrolled diabetes, long term antibiotic & steroid therapy, radio, chemotherapy, immunosuppressive treatment & immunodeficient diseases. Among these diabetes is the condition which is increasing day by day in India and is one of the predisposing factor for head & neck fungal infection especially aspergillus fungal infection. Mycosis of paranasal sinus has become a more common disease7. The recent rise in mycotic nasal & paranasal infections is due to both improved diagnostic research and an increase of the conditions that favour fungal infections, which increase in immunocompromised patients because of changing life styles etc8. The etiopathogenesis of paranasal fungal infection is a debatable topic, but there are three main accepted theories including odontogenic, aerogenic, and mixed origins. Here we present our experience regarding cases in which paranasal sinuses were involved by some of the variety of fungal infections.

O22
External carotid artery control "technique, application, evolution and a review of literature

Radha Prabhu K, Sanjiv Nair

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Abstract
Background
Maxillofacial region is a highly vascular region, which implies to its propensity for fatal pathologies and injuries and at the same time

heals the most complex tissue insults with least amount of scarring and recovery time.

Objective

With this in the background it is very essential to have an intra operative technique to reduce the blood loss and have least implication on healing. External carotid artery (ECA) control is one such adjunct towards this goal.

Methodology and results

This paper presents the ECA control technique, its history and evolution. The technique involves purposeful exposure and application lax tourniquet around the ECA which can be used to control blood flow intra operatively. We have successfully used the same for about 75 patients mostly for vascular malformations and various other pathological inflictions of the maxillofacial region. There were no post operative vascular complications in any of the patients.

Conclusion

External carotid artery control is a powerful adjunct for any maxillofacial surgeon. Knowledge of its application and judicious use can prove to be a powerful skill for management of complex surgeries with expected excessive intra operative blood loss.

O24

Role of laser in oral and maxillofacial surgery: a review of literature

Arunesh Kumar Tiwari

Rajkiya Medical College

Abstract

Background

Lasers have been used in dentistry for diagnostic and therapeutic purposes for more than 30 years, and are an indispensable instrument in any modern dental surgery. The use of lasers enables new treatment methods to be employed in order to meaningfully supplement traditional therapies.

Objective

The purpose of this paper is to overview the use of laser as use widely.

Methodology

There are various use of laser in oral and maxillofacial surgery described in various literatures. In this paper we are summarised the role of laser in different oral and maxillofacial disease by review of literature

Results

Oral and Maxillofacial Surgery is a vast branch of dentistry which includes procedures ranging from simple extraction to pathologies of both the hard and soft tissues. Lasers have been used in surgical procedures involving both the hard and soft tissues of the oral cavity.

Conclusion

Based on extensive review of literature certain conclusion can be made regarding the use of lasers.

O26

"Beauty and the Beast "Botulinum Toxin A—cosmetic and adjunctive applications in the maxillofacial facial region

Shubha Lakshmi S

College of Dental Sciences

Abstract

Facial wrinkles and unsightly facial expressions are due to overactivity of the underlying facial musculature. Dynamic rhytids (caused by hyperfunctional muscles) in the perioral, glabellar, and forehead regions can cause a patient's expressions to be misinterpreted as angry, anxious, fearful, or fatigued. In certain cases bruxism and masseteric hypertrophy can have functional and esthetic issues. An emerging treatment option to address these issues is the use of botulinum toxin A (Botox) to decrease the appearance of the wrinkles, which yields a more esthetic and youthful facial appearance. Botox is a neurotoxin that is produced by the bacterium Clostridium botulinum and causes muscle paralysis by inhibiting acetylcholine release at the neuromuscular junction. A thorough understanding of the indications, techniques, dosages, and complications and their management is imperative to achieve a satisfactory result. This paper will review the pathogenesis of facial wrinkles as well as the history, techniques, clinical controversies, and other important considerations for successful treatment of facial wrinkles with Botox. This paper describes our experience with the cosmetic use of botulinum toxin. The areas that can be treated, the appropriate technique for each area and special considerations such as dose, dilution, and relevant anatomy are discussed.

O27

Tracheostomy In Maxillofacial Surgery Patients: A Clinical Experience

Karan Padha

Abstract

Tracheostomy is one of the most frequently performed procedures in Intensive care units for a number of reasons such as to secure airway in severe maxillofacial trauma, to facilitate weaning from positive pressure ventilation in acute respiratory ventilation or prolonged ventilation, to secure and clear an airway in the upper respiratory tract where obstruction is a risk, to facilitate the removal of respiratory secretions and to protect/minimize risk of aspiration in the patient with poor or aborted cough reflex. It also has other advantages such as improved oral hygiene for the intubated patient, decreased requirement for sedation in the intubated patient, oral movement for communication, nutrition and hydration (with manipulation), reduction in damage to the larynx, mouth or nose from prolonged endotracheal intubation, vocalization (with manipulation) and improved patient comfort. This paper discusses about the various unusual scenarios in which tracheostomy is performed and the role of maxillofacial surgeon in these conditions.

O28
"CAUGHT UNWARE" Awareness of Oral and Maxillofacial Surgery among the general public

Kavita Gupta

YMT Dental College & Hospital, Navi Mumbai

Abstract

Introduction

OMFS has important links with other disciplines in medicine and dentistry. The specialty of Oral and Maxillofacial Surgeons encompasses the diagnosis and surgical management of a variety of pathologic, functional & esthetic conditions of the Oral and Maxillofacial region. Despite the specialty's prominent role in the field of dentistry, a lack of understanding remains among general educated people as to the exact scope of the OMFS. A study was devised to determine the awareness of OMFS among the general public & to improve their understanding.

Materials & Methods

A survey consisting of ten Multiple choice questions was compiled and distributed to qualified general public by physical distribution of questionnaire. The participants had to select the most appropriate response. Once the questionnaire was self completed, an information sheet was provided to improve their awareness of OMFS. The survey results were compiled and submitted for statistical analysis.

Conclusion

Awareness of OMFS among the general public remains low. Therefore, OMFS practitioner should take upon themselves to be active promoters while being guardian and ambassadors for their specialty, failing which OMFS will be another lost tribe.

O29
Applications of Soft Tissue Diode Laser In Oral Surgery

Pankaj Shourie

CHC Raipurani

Abstract

More than in any other dental specialty, lasers have played an integral role in the practice of OMF surgery. Lasers are rapidly becoming the standard of care for many procedures performed by oral and maxillofacial surgeons. The reason for this transition is due to the fact that many procedures can be executed more efficiently and with less morbidity using lasers as compared to a scalpel, electrocautery or high frequency devices. Because many of these procedures are routine for the practicing surgeon, the laser is used as a better tool to facilitate the same goals; the transition to laser surgery by most OMF surgeons has been gradual and relatively simple. This paper presenting the study (conducted at SDDH and DC Barwala) done using Soft Tissue Diode Laser for minor oral surgical procedures under topical and local anesthesia. Procedures include Frenectomies, Mucocele removal, Ranula excision, Fibroma removal etc. Post operative findings (pain, swelling, wound healing) were compared at 24 h 7 days and 14 days.

E- Poster Presentations

Cleft and Craniofacial Surgery (CODE- EP-CC)

EP-CC1
Congenital heart disease and its association with cleft lip and palate

Anil Desai, Niranjan Kumar, Gautam, Srikanth K B

SDM College of Dental Sciences and Hospital

Abstract

Aims & Objectives

To study the prevalence, type of congenital heart disease and its impact on treatment planning in cleft lip and palate patients.

Material and Method

A retroprospective study of 1381 patients with cleft lip and palate from 2010 to 2014 was done. Retrospectively data was collected from clinical records while prospective data was collected by clinically examining patients, evaluating the chest radiograph and 2D Echo findings.

Results

We had 2.8 % of cleft lip and palate patients with congenital heart diseases with a strong correlation between chest radiograph and 2D Echo findings. Congenital heart diseases were associated more with cleft palate group than cleft lip group. Septal defects were more common followed by valvular defects.

Discussion

The association of oral clefts and congenital heart disease varies according to the method employed and the studied populations. Overall incidence of congenital heart disease in our study was 2.8 % while the study performed by Geis et al had prevalence rate of 6.7 % in patients with septal defects; surgery was delayed and carried out after 3 months with prophylaxis for subacute bacterial endocarditis. Patient having multiple congenital heart defects, surgery was deferred.

Conclusion

The results emphasised the association between clefting and congenital heart disease. Routine cardiac evaluation of cleft lip and palate patients is essential to rule out associated cardiac disease. Most of the patients can be operated without risk by altering the treatment plan.

EP-CC2
Intrauterine repair of cleft lip & palate (the miracle of science)

Praveen Kumar Singh

J. S. S. Dental College & Hospital, Mysore, Karnataka

Abstract

Cleft lip and cleft palate are birth defects that occur when a baby's lip or mouth do not form properly during pregnancy. Together, these birth defects commonly are called orofacial clefts. Orofacial clefts are among the most common congenital anomalies. The Aim of this poster is to present the applications in prevention, diagnosing and treating orofacial clefts. Children with a cleft lip with or without a cleft palate or a cleft palate alone often have problems with feeding and speaking clearly. They also might have problems with their teeth. Services and treatment for children with orofacial clefts can vary depending on the severity of the cleft; the child's age and needs; and the presence of associated syndromes or other birth defects, or both. The main focus is on the futuristic intercepting method of treating orofacial clefts by intrauterine methods that includes open fetal surgery and feto-endoscopic surgery. With treatment, most children with orofacial clefts do well and lead a healthy life. Some children with orofacial clefts may have issues with self-esteem if they are concerned with visible differences between themselves and other children. Parent-to-parent support groups can prove to be useful for families of babies with birth defects of the head and face, such as orofacial clefts. With this background, the poster focuses on the recognition of advancement and their appropriate management of orofacial clefts by Oral & Maxillofacial Surgeons around the globe as a long-term aid in dentistry on the facial structures and oral cavity.

EP-CC3
Pre surgical management of cleft lip and cleft palate

Jignesh Maheshwari, Sarvesh Urolagin, Anil Managutti

Narsinhbhai Dental College and Hospital, Visnagar, Gujarat

Abstract

Cleft lip and palate are one of the most common congenital craniofacial malformations, consisting of fissures of the upper lip and/or palate. While preoperative treatment for infants with cleft lip and palate is still a scientific debate, patients with this malocclusion usually have to be treated from infancy to adulthood. Presurgical infant orthopaedics (PSIO) was introduced to reshape alveolar and nasal segments prior to surgical repair of cleft lip. Naso-alveolar molding provides excellent results when considered and started early in the neonatal. Early treatment is important not only due to esthetic and functional concerns, but also for a positive psychological impact on the child. Nasoalveolar molding can be a useful adjunct for treatment of cleft lip nasal deformity. It is a cost-effective technique that can reduce the number of future surgeries such as alveolar bone grafting and secondary rhinoplasties. The purpose of this poster is give information about cleft lip and palate and presurgical nasoalveolar molding.

EP-CC4
Gordon syndrome -a case report

Daya Shankara Rao JK, Aadhya, Anil, Gaurav Bhati

Faculty of Dental Sciences SGT University

Abstract

Arthrogryposis Multiplex Congenita, AMC, is a heterogeneous condition which incorporates multiple congenital joint contractures in two or more areas of body. It is mainly due to impaired fetal movements. Distal arthrogryposis (DA) syndromes are often hereditary, and joint involvement is predominantly in hands and feet. A rare case of Gordon Syndrome DA3 diagnosed in a four year old female reported in the Department of Oral & Maxillofacial Surgery with the complaint of difficulty in speech and feeding with cleft palate defect,

camptodactyly and club foot. The cleft palate defect surgical correction was done using Pinto's modification of Wardill-Kilner two-layer palatoplasty without radical dissection soft palate musculature. A brief review of this rare syndrome and its management would be discussed.

EP-CC5
Management of Craniosynostosis in Apert's syndrome—A case report

Vydehi Institute of Dental Science &Research center

Suresh Menon, Mythili

Abstract
Craniosynostosis consists of premature fusion of one or more cranial sutures, often resulting in an abnormal head shape. Apert's syndrome is one of the most common and severe craniosynostosis syndromes. Simple craniosynostosis is a term used when only one suture fuses prematurely. Complex or compound craniosynostosis is used to describe premature fusion of multiple sutures. Apert's syndrome is a clinically distinct human condition characterized by: craniosynostosis, symmetric syndactyly, central nervous system malformations, clover leaf skull, alteration in size and position of the temporalis muscle and superficial temporal fat pad, facial acneiform lesions, upper and lower respiratory compromise, oral manifestations and cervical anomalies.
Objective
The approaches differ widely based on the age at which surgery is being performed and the type of procedure carried out considering the functional and esthetic correction. Surgical treatment of the upper and midface are performed during infancy and childhood and the maxillomandibular skeletal discrepancy and malocclusion is managed during adolescence.
Methodology
Two months old baby with apert's syndrome underwent cranioplasty with fronto-orbital advancement.
Result
Achieved expected result at the first line of treatment.
Conclusion
This poster presents a case of apert's syndrome and the first line of surgical management.

EP-CC6
Cleft palatal fistula, incidence and assessment of surgical outcome using difficulty index

Anil Desai, Niranjan Kumar, Shruthi, Punit Singh Dikhit

Sri Dharmasthala Manjunatheshwara College of Dental Sciences-Dharwad

Abstract
Aims and Objective
The purpose of this poster is to highlight the incidence, type of fistula, to evaluate difficulty index and difficulty level in planning the treatment accordingly and to predict the prognosis pre-operatively.
Materials and methods
This retrospective study included patients operated for cleft lip and palate in our centre, from 2012 to 2015. Retrospectively data was collected from clinical records regarding Incidence, Site & size of fistula, Type of cleft, Method of fistula closure and all these data categorized, analyzed and scored according to difficulty index to help predict the surgical outcome.
Results
In our study we observed, total incidence of palatal fistula was 3.9 %. Patient with bilateral cleft lip palate had more incidence of fistula accounting for 42 %. Fistula in anterior palatal region was more common accounting for 60 %. Anterior palatal fistula with bilateral clefts has highest difficulty index and outcome was poor in our study.
Conclusion
Palatal fistula closure is a technically difficult procedure with high recurrence rate. Hence the difficulty level for closure need to be evaluated so as to predict the prognosis of procedure prior to surgery.

EP-CC7
Indigenous bidirectional distraction osteogenesis of cleft maxilla using facemask

Srinath N, Swathi Iyengar N R

Krishnadevaraya College of Dental Sciences and Hospital

Abstract
Primary cleft lip and palate repair done during infancy and early childhood improves facial appearances, speech & deglutition. But a long term negative effect of these early surgical intervention is the impairment of maxillary growth, leading to secondary deformities of jaw and occlusion. The resulting maxillary hypoplasia in both transverse and antero-posterior direction do not respond to orthodontic treatment alone and require additional surgeries for maxillary advancement. The greater tendency for relapse due to scarring from previous surgeries and the extended period of treatment is both taxing to the patient and a challenge to the surgeon. To overcome this challenge we propose an indigenous method of simultaneous bidirectional correction of cleft hypoplastic maxilla through principle of distraction osteogenesis using hyrax and facemask. A one stage correction of maxilla in both antero-posterior and transverse direction can be acheived. An integrated surgical and orthodontic approach through the principles of distraction osteogenesis not only reduced the treatment duration in cleft patients, but we can also avoid complications arising from use of RED distractors.

EP-CC8
Skeletal stability achieved using HYRAX in patients with maxillary hypoplasia secondary to cleft lip and palate

Kiran K S, Sankar Vinod V, Kiran K S

Mar Baselios Dental College

Abstract
Poster on retrospective study aimed to evaluate the comparative efficacy of toothborne distractor (HYRAX) in anterior maxillary and skeletal stability achieved in patients with maxillary hypoplasia secondary to cleft lip and palate.

EP-CC9
Volumetric assessment of residual bone defect following alveolar bone grafting & transport distraction for cleft alveolus management using volumetric 3-D CT analysis

Muruganand

Meenakshi Ammal Dental College

Abstract
Aim & Objectives
To assess the residual bone defect by volumetric method following alveolar bone grafting and transport distraction for cleft alveolus management using volumetric 3 D CT analysis.
Patients & Methods
Patients included in the study were randomized into two groups Group A and Group B via systematic randomization. Group A were patients who were selected for traditional alveolar bone grafting with Iliac bone and Group B were patients who were selected for alveolar transport distraction osteogenesis. The trial was single blinded where only the investigator was blinded to the technique of surgery. Post operatively after 6 months radiographic evaluation to note quality of bone uptake and tooth migrations were done using Volumetric CT assessment.
Result
Our results showed that alveolar bone grafting procedure yields predictable results and post-surgical outcome with good quantity and quality of measurable bone. This study is the first of its kind to compare traditional alveolar bone grafting versus transport distraction osteogenesis with a 6 month follow up.

EP-CC10
Healing the curse

Debasish Sinha

Sree Balaji Dental College and Hospital

Abstract
Oronasal fistula (ONF) is the commonest complication associated with cleft palate surgery. The main symptoms associated with ONF are nasal regurgitation of food matter and hypernasality of voice. Repair of cleft palate under tension is considered to be the main reason of ONF though vascular accidents and infection can also be the cause. Most of the ONFs are situated in the hard palate or at the junction of hard and soft palate. Repair of ONF depends on its site, size and mode of presentation. A whole spectrum of surgical procedures starting from small local flaps to microvascular tissue transfers have been employed for closure of ONF. Recurrence rate of ONF is 25 % on an average after the first attempt of repair.

EP-CC11
Naso-Alveolar Moulding (NAM): A treatment for cleft patients—A case report

Bhati Muddasir

Abstract
The NAM appliance is based on the finding that a high degree of plasticity is maintained in the cartilage of infants during the first 6 weeks after birth after which, there is a gradual decrease in plasticity. We report a child aged 1 month having unilateral cleft lip, cleft of the alveolus and the soft palate.
Aim
The principal aim of NAM is to reduce the severity of the initial cleft deformity. There have been numerous techniques documented over the centuries to improve the position of the cleft alveolar segments.
Materials and Method
After taking pediatric clearance and necessary precautions, impression was recorded with a rubber base impression material and a cast was poured with dental stone. NAM appliance was then fabricated with heat cure acrylic resin material. The appliance with extraoral elastics was then delivered to the patient. The patient's mother was instructed the care and maintenance of the appliance. Nasal stent was added to the appliance to lift the depressed nasal dome after 4 weeks.
Conclusion
Significant moulding of the alveolar cleft and elevation of the depressed nasal dome was achieved after 6 weeks of NAM therapy.

EP-CC12
Surgical repair of cleft palate -A case report

G. Muralidharan

Abstract
Cleft palate is an important craniofacial defect often associated with various genetic syndrome resulting in functional deficits. This poster describes patient evaluation, methods of repair including palatoplasty and v-y push back technique, post operative care and potential complications. Timely diagnosis and multidisciplinary team care is vital to enhance the quality of life in these patients.

Dentoalveolar Surgery (CODE-EP-DS)

EP-DS 1
Epulis Fissaratum, A Case Report

Rudraprasad Chakraborty

Rama Dental College Hospital and Research Centre

Abstract
Epulis Fissuratum is defined as benign hyperplasia of connective tissue which develops as a reactive lesion to chronic mechanical irritation from ill fitted denture flange. Ill fitted denture and ignorance of the common people regarding the side effect of such may lead to some unwanted growth in oral cavity, most commonly encountered is epulis fissuratum. This type of growth, when presented as large lesion, sometimes confusing clinically to diagnose. Here, a case report of epulis fissuratum is presented which has its growth even after discontinuation of the faulty denture.
Objective
Removal or disuse of Faulty Denture alone only does not cure epulis fissuratum. This case report shows the continuation of growth of the tumour even after stopping use of faulty denture. The stimulus of growth was coming from the lower teeth which was irritating the growth.
Methodology
An Excisional Biopsy was done under local anaesthesia and specimen was sent for histopathological examination.
Result
Complete cure from the tumour.
Conclusion
Treatment of epulis fissuratum not only includes disuse of the faulty denture but any other local irritating factors have to be identified and

treated likewise generally. Commonly people just stop using the denture and are reluctant regarding proper treatment. Proper motivation and a systemised approach to this kind of benign tumour may render the total cure of the patient with a good oral health.

EP-DS 2
Techniques of inferior alveolar nerve block

Madhumati Singh, Arka Das

Rajarajeswari Dental College and Hospital

Abstract
Providing effective pain control is one of the most important aspects of dental care. Unfortunately the ability to obtain profound anesthesia for dental procedures in the mandible has proved extremely elusive. This is even more of a problem when an infected teeth are involved, primarily mandibular molars. It is commonly stated that the significantly higher failure rate for mandibular anesthesia is related to the thickness of the cortical plate of the bone. A second difficulty with the traditional halsted approach to inferior alveolar nerve block is the absence of consistent landmarks. Multiple authors have described numerous approaches to this inferior alveolar nerve. Reported failure rates for the IANB are commonly high ranging from 31 to 41 % in mandibular molars to 42 %, 38 % and 46 % in second and first premolars and canines respectively and 81 % in lateral incisors. This difficulty in achieving mandibular anesthesia has over the years led to the develoepement of alternative techniques to the traditional inferior alveolar nerve block. The inferior alveolar nerve block anesthetizes the inferior alveolar, incisive, mental and lingual nerve. This poster briefly explains the types and modifications of inferior alveolar nerve block.

EP-DS 3
Sensory impairment of the lingual and inferior alveolar nerves following removal of impacted mandibular third molar-a review of literature

Amarnath Chattopadhyay

Guru Nanak Institute of Dental Sciences and Research

Abstract
Surgical extraction of impacted lower third molars (ILTM) is one of the most common surgical procedure in the domain of Oral and Maxillofacial Surgery, and its major complication include postoperative neurosensory deficits in the form of having parasthesia, anesthesia and sometimes dysesthesia. Inferior alveolar nerve (IAN) injury, which usually presents with parasthesia or anesthesia with reported incidence of 0.26–8.4 %. The reduction of incidence of permanent sensory diminution during follow up period which varied from 6 months-24 months in literature to literature. For IAN permanent deficit ranges from 0.6 %-0.9 %. Lingual nerve (LN) deficit, due to its close proximity to the ILTM has a reportedly high incidence of 0.1 %-22 % with reduction of the deficit by 2–13 weeks postoperatively; while the permanent damage ranges from 0.37 %-1.6 %. Controversy exists whether elevation of lingual flap & attempt to protect the LN even by specially designed retractors increase or decrease the risk of LN damage. This review paper is intended to address the relation of the age of the patient, depth of tooth impaction, types of impaction, proximity of the root to IAN, surgical experience of the operator & surgical technique with the prevalence of IAN deficit as well as the type of incisions and the relationship between reflection of the lingual mucoperiosteal flap with refence to LN deficit.

EP-DS 4
Comparison of efficacy of lingual nerve block with inferior nerve block in achieving lingual soft tissue anaesthesia—a randomized controlled clinical trial

Simin Abraham, Krishna Kumar Raja, Elavenil

SRM Dental College, Ramapuram, Chennai

Abstract
To compare the efficacy of lingual nerve block with inferior nerve block for lingual nerve anaesthesia.
Methodology
100 patients undergoing extraction of lower premolars and canines were randomly selected for the study. The inclusion criteria consisted of patients aged 20–50 years and presence of lower second molar. Patients with infection or edentulous ridge in the lower molar region and elderly patients were excluded from the study. The outcome parameters assessed are- 1. Pain in the ipsilateral lingual mucoperiosteum of molar, premolar, canine and incisors, floor of the mouth & tongue. 2. Taste sensation in the ipsilateral tongue.
Conclusion
Lingual nerve block is more effective and has distinct advantage over inferior alveolar nerve block.

EP-DS 5
Coronectomy of mandibular third molar: a reduced risk technique of inferior alveolar nerve damage

Raj Rai, Firdos Mazgaonkar

Y. M. T Dental College

Abstract
Removal of mandibular third molar is a common oral surgical procedure. This procedure is associated with significant risk of injury to inferior alveolar nerve, if the roots are in close approximation with the canal. Coronectomy is a procedure which involves the removal of the crown of the tooth leaving the roots undisturbed. After 5–6 months the roots supra erupts 3–4 mm which is then extracted. This is a conservative and successful procedure in minimizing the incidence of IAN injury. This poster outlines the advantages, disadvantages, indications & contraindications.

EP-DS 6
Efficacy of cone beam computed tomography in the assessment of the relationship between impacted mandibular third molars and the mandibular canal

Jahnur Ikramul Islam

School of Dental Sciences, Greater Noida

Abstract
Third molars have a high incidence of impaction associated with many conditions such as pericoronitis, caries on the distal surface of

the second molar, pain, external root resorption and odontogenic cysts or tumours. An imaging examination is undoubtedly an essential tool for diagnosis and surgical management because it provides valuable information about the tooth position, the number/morphology of the roots and, especially, the relationship of the tooth to adjacent structures. Cone beam CT (CBCT) is a radiographic method that has been used in several areas of dentistry because it shows three-dimensional (3D) images of dental structures in addition to providing clear structural images with high contrast. Increasingly, CBCT is replacing medical CT because it provides adequate image quality associated with a lower exposure dose, low cost of the examination compared with CT, fast scanning time, lower number of artefacts and real-time image analysis. The aim of the poster is to provide information for maxillofacial surgeons to decide the efficacy of pre-operative CBCT in predicting the absence of corticalization between the mandibular canal and the third molar in mandibular third molar extractions.

EP-DS 7
The Healing Light: Low level laser therapy in the management of postoperative surgical Sequelae after removal of impacted mandibular third molar—A review

M. I. Parkar, Nileshkumar Mishra, Thorat Sagar Dinkar

School of Dental Sciences, Krishna Institute of Medical Sciences Deemed University, Karad. District Satara, Maharashtra

Abstract
Surgical extraction of impacted mandibular third molar is the most commonly practised minor surgical procedure by an oral surgeon. Pain, trismus and swelling, increase patients discomfort and quality of life in immediate post operative period. These complications arise secondary to the inflammatory process initiated by surgical trauma. Conventional methods to inhibit these postoperative sequelae include use of non-steroidal anti-inflammatory drugs, cold pack application, use of serratiopeptidase enzymes and inserting tube drain. Studies have shown that Low energy laser therapy (LLLT) reduces pain, accelerates healing and inhibits the overall inflammatory processes. Recently LLLT has been used successfully for the management of pain, swelling and trismus after removal of impacted mandibular third molars and periodontal procedures. It has also been used for treatment of post-adjustment orthodontic pain, chronic facial pain, gingivitis, reduction of herpes simplex and dentinal hypersensitivity. This poster describes and reviews the application of this newer technique in control of pain, swelling and trismus associated with surgical removal of impacted mandibular third molars.

EP-DS 8
Combined use of alveolar distraction osteogenesis and PRF in anterior vertical ridge augmentation followed by dental implants

Arun Dugal, Akshay Mishra, Rohan. K. Gupta

Bharati Vidyapeeth Deemed University Dental College and Hospital, Pune

Abstract
Vertical defects of the anterior alveolar ridge are challenging in implant dentistry. The nature of the deficiency may present an obstacle to ideal implant positioning by compromising aesthetic and prosthetic needs. Various techniques, such as onlay bone grafting, segmental osteotomy (SO), guided bone regeneration (GBR), use of alloplastic materials and alveolar distraction osteogenesis (ADO) have been suggested to manage those situations. Each of these modalities has its advantages and disadvantages. When using an autogenous bone graft, donor site morbidity is unavoidable and some resorption of the bone graft occurs. ADO has an advantage of being capable of enhancing both hard and soft tissue simultaneously. The combination of alveolar distraction osteogenesis with Platelet rich fibrin (PRF) during the consolidation phase of distraction can produce a stable aesthetic reconstruction of the alveolar bone and attached mucosa. The poster shares our experience in alveolar ridge augmentation using a central endosseous distraction device with platelet rich fibrin PRF) followed by dental implant placement.

EP-DS 9
Treatment modalities of oral submucous fibrosis

Shivani Jain, Vikas Aneja, Pc Swami, Nupur Saxena

Maharaja Ganga Singh Dental College and Research Centre

Abstract
OSMF is a chronic insidious disabling disease involving the oral cavity, oropharynx and rarely larynx. It is the disease primarily seen in Indian subcontinent and Asian migrants in the west. The etiology of this common condition is still obscure although betelnut chewing is accepted as a consensus to be the primary cause. As it is having various etiology, the treatment modalties have been tried by various authors with various unpredictable results. Conservative treatment include stoppage of habit, avoiding consumption of spicy foods, aerated drinks, treating anemia and encouraging a balanced diet with vitamin B supplements. Medical treatment include submucosal steroidal injection such as depomedral or methylprednisolone, fibrinolytic agents like hyaluronidase, injection vitamin A, E. Surgical treatment includes fibrotomy with or without grafting (such as split skin graft, buccal fat pad graft, nasolabial graft) and post operative physiotherapy. After having a glance of vast literature on treatment of OSMF, there is a hope for better management of the disorder for having better life to these patients suffering from this precancerous condition.

EP-DS 10
Versatility of the pedicled buccal fat pad

Bharati Vidyapeeth Dental College, Pune

Yash Merchant, Halli

Abstract
The buccal pad of fat is a specialized mass of encapsulated adipose tissue distinct from subcutaneous fat in both appearance and form. While traditionally thought of as a surgical nuisance, it has gained immense popularity over the years as a pedicled flap due to its ease of access and harvest in oral surgical procedures. Other advantages include elimination of donor site morbidity and high success rate because of its vascularity and potential to completely epithelialise within a few weeks. Furthermore it is located in the same surgical

field as the defect to cover, thereby diminishing the risk of infection. It has proved to be a versatile flap with a wide range of utility that includes facial augmentation procedures, closure of oro-antral fistulas, as an adjunct in TMJ reconstruction and is a popular reconstructive option after bilateral excision of fibro-elastic bands in OSMF. It is a convenient and reliable method for the reconstruction of oral defects of the soft palate/posterior alveolar region of maxilla (upto 5 cm in diameter) after excision of lesions of verrucous carcinoma/hyperplasia, leukoplakia, erythroplakia, etc. The poster addresses the anatomical considerations, versatility, limitations and complications of the pedicled buccal fat pad.

EP-DS 11
Role of P. R. F in third molar surgery

Pallavi Kalia

Himachal Institute of Dental Sciences, Paonta Sahib

Abstract
Surgical removal of impacted third molar is one of the most commonly performed minor oral surgical procedure in oral and maxillofacial surgical practice. The post operative sequelae mainly include pain, swelling and trismus. In the past various platelet gel concentrate were used, However platelet rich fibrin a second generation platelet concentrate after surgical extraction of third molar may help to improve wound healing and promoting faster regeneration of bone.Aim of our poster presentation is to introduce the advantage of platelet rich fibrin in third molar surgery.

EP-DS 12
Atraumatic Extractions; a need of new age dentistry

Nilesh Patil, Madhura Kulkarni

School of Dental Sciences, Krishna Institute of Medical Sciences Deemed University Karad

Abstract
With the growth of implant dentistry and its high success rate and predictability, more questionable teeth that in the past may have been salvaged through extreme endodontic or periodontic procedures are now extracted for implant placement. A good skill set in basic and complex exodontia is therefore essential for atraumatic extractions. A Periotome is developed to atraumatically extract teeth for immediate implant placement. Piezosurgery is being used for oral surgery techniques such as removal of certain third molars. The inventory of physics forceps created a new spin in exodontias. Lasers are also being used for a wide variety of procedures such as removal of impacted teeth. Orthodontic techniques are also being used to help facilitate extraction of impacted teeth near the inferior alveolar nerve. The use of polyurethane foam to help close oral antral communications following dental extractions. Use of Platelet derived growth factors has also been used to accelerate healing and maintain bone volume at extraction site. This poster presents recent advances in exodontias for atraumatic extractions with better outcomes in field of Oral and Maxillofacial Surgery.

EP-DS 13
Submucous tramadol increases the anesthetic efficacy of articaine with epinephrine in inferior alveolar nerve block

Sanjeev Kumar, Pankaj Kukreja, Shipra Bansal

I. T. S CDSR

Abstract
The purpose of this study was to evaluate the effect of submucous tramadol as adjuvant of 4 % articaine with 1:100,000 epinephrine in inferior alveolar nerve block. A double-blind, randomized, placebo-controlled, crossover clinical trial was conducted. Fifty healthy young volunteers were randomized into two treatment sequences using a series of random numbers. Sequence 1: Group A, 4 % articaine with 1:100,000 epinephrine plus submucous tramadol 50 mg (1 mL of saline) and one week later. Group B, 4 % articaine with 1:100,000 epinephrine plus submucous placebo (1 mL of saline). Sequence 2: Group B and one week later Group A. All treatments were administered 1 min after the patient informed anesthesia of lower lip. We evaluated the duration of anesthesia of lower lip, anesthetic efficacy, and local and systemic adverse events. Anesthetic efficacy was better in group receiving submucous tramadol compared with group receiving submucous placebo ($P < 0.05$). Submucous tramadol increased the anesthetic efficacy and duration of articaine with epinephrine of soft tissue in inferior alveolar nerve block and also the number of pain killer consumed by patient is reduced.

EP-DS 14
Pterygomandibular Space—A concern for successful Inferior Alveolar Nerve Block

Nageshwar Iyer, Rishabh Bhanot

M M College of Dental Sciences AnMullana, Ambala

Abstract
The most widely used technique for anaesthetizing mandible in many parts of the world is inferior alveolar nerve block. For successful administration of this nerve block, we should know about the detailed anatomy of pterygomandibular space and related structures forming its boundaries. Pterygomandibular space is a paired potential space present in head and neck in which local anesthetic solution is deposited during an inferior alveolar nerve block. Other structures like lingual nerves, sphenomandibular ligament, interpterygoid fascia are of great importance as these structures influence the effectiveness of local anaesthesia in the region. Due to variations in anatomical structures and intraoral landmarks, anaesthetic failures may occur. So with the complete knowledge of variation in anatomical structures, we

can get a clear understanding about the technique and an unassailable plus more effective anaesthesia.

EP-DS 15
Overview of dento-alveolar fracture

Chaitra Shetty

SDM College of Dental Sciences and Hospital, Dharwad

Abstract
It is one of the most common type of facial injury associated with concomitant facial fractures. Overall incidences of Dento-alveolar fractures is 48.25 %. The objective of this study was to complete a comprehensive retrospective review of incidences, epidemiology and management based on the data collected over a period of five years from 2009 to 2014 in the department of oral and maxillofacial surgery of SDM Dental College, Dharwad. Aim of this study is to examine age, gender, location, time and type of injury sustained in relation to dento-alveolar trauma. Failure to recognise or obtain appropriate consultation can result in premature tooth or alveolar bone loss, leading to problematic prosthetic rehabilitation. Hence, purpose of this poster is to review concepts of recognition, management and prevention of dento-alveolar trauma.

EP-DS 16
Coronectomy—a new surgical approach for impacted mandibular 3rd molar

Hemal Katwala, Anil Managutti

Narsinhbhai Patel Dental College and Hospital, Visnagar

Abstract
Extraction of an impacted mandibular third molar has the potential risk of causing temporary or permanent neurologic disturbances of the inferior alveolar nerve (IAN). The incidence of IAN injury reported in the literature ranges from 1.3 % to 5.3 %. The risk of this complication depends mainly on the position of the impacted tooth in relation to the inferior alveolar canal before surgery. Coronectomy is procedure in which surgical removal of crown only and leaving root undisturbed. Injury to the IAN can occur from compression of the nerve, either indirectly by forces transmitted by the root during elevation or directly by elevators. The method aims to remove only the crown of an impacted mandibular third molar while leaving the root undisturbed, thereby avoiding direct or indirect damage to the IAN. Here by presentation of Coronectomy based on literature review and case done in our department was performed to intercept clinical trials. Result will display in presentation. The aim of my presentation was to evaluate the clinical effectiveness of the surgical technique of coronectomy after third molars extraction in close proximity with the inferior alveolar nerve.

EP-DS 17
Autotransplant: A cost effective alternative to dental implant

Kartik Dholakia

Karnavati School of Dentistry

Abstract
Autotransplantation of tooth empowers the usage of natural tooth to replace a badly carious or missing tooth other than prosthesis. In that procedure, tooth bud, tooth with incomplete formed root or tooth with complete formed root can be used as a donor tooth. Higher success rates are achieved with teeth that have immature roots in younger age. Autotransplantation of tooth is very beneficial method for replacing tooth economically as well as conservatively.

EP-DS 18
Comparison of local anesthetic efficacy of tramadol hydrochloride (with adrenaline) versus lignocaine hydrochloride (with adrenaline) in non complicated tooth extractions

R. S. Bedi, Madhumita Srivastava, Mohit Saxena

Saraswati Dental College Lucknow, India

Abstract
Aim
To evaluate the efficacy of local anesthesia infiltration using tramadol hydrochloride with adrenaline (versus 2 % lignocaine hydrochloride with adrenaline in extraction of maxillary teeth.
Method
Double-blinded study was done in patients who required extraction of maxillary teeth bilaterally, by intraoral method of extraction. Patients were allocated randomly into 2 groups: Group A, each patient received drug T (5 %Tramadol HCl and adrenaline 0.0125 mg); & Group B, each received drug L (2 %Lidocaine HCL with 0.0125 mg adrenaline). Extraction was done under local infiltration and block for palatal anesthesia.
Result
There was no significant difference between the two study groups in the onset of anesthesia, intraoperative pain, duration of surgery and side effects. However there was a significant difference in duration of anesthesia where the group L achieved longer duration of action of local anesthesia.
Conclusion
These study findings suggested that tramadol HCL can be used as alternative to lidocaine HCL in combination with adrenaline to achieve local anesthesia in situation where lidocaine HCL is contraindicated.

EP-DS 19
A misdirected tooth lodged in the condylar neck—case report

Ramdas Balakrishna, Sanidhya Sreenivasa

K L E Society's Institute of Dental Sciences

Abstract
Third molar impaction is a most common condition observed in the clinics by an oral and maxillofacial surgeon. True incidence and aetiology of ectopic positioning of mandibular third molars is still unknown. Several theories have been suggested to explain the ectopic eruption, including aberrant eruption, trauma, and ectopic formation of the germs of the teeth. It has been suggested that an aberrant eruption pattern occurred when the tooth has been displaced by a lesion, usually an odontogenic cyst. This is a case report of a 44 year old male patient who presented with complaint of pain and discharge from right back tooth region for a period of 6 months. On OPG evaluation ectopically positioned right mandibular third molar in the right sub-condylar region associated with a small cyst was noticed. This poster shows the management of this ectopically positioned mandibular third molar.

EP-DS 20
A Comparative evaluation of efficacy of physics forceps and conventional extraction forceps in extraction of upper molars

Sapna K Vadera

VSPM's Dental College and Research Centre, Nagpur

Abstract
Various technological advances in techniques to improve outcomes for patients with the aim of atraumatic extraction are available. The Physics forceps is designed in such a way that the "bumper" on the buccal side will act as a fulcrum while flat palatal beak will be the effort arm. Thus it acts as a 1st class lever providing a mechanical advantage which makes it very efficient. Unlike conventional forceps, the one point contact made on the tooth reduces the trauma on the surgical site and consequently the pain and inflammation which results in post operative phase. The Physics forceps thus offers the clinician unique opportunity to undertake conventionally difficult extractions atraumatically so as to maintain alveolar height thus facilitating immediate prosthetic rehabilitation.
Objective
To Compare the efficacy of Physics forceps and extraction forceps in extraction of upper molars.
Methodology
A randomized, single blind, prospective study is being carried out in the Dept. of OMFS and outcome variables (operative complications, inflammatory complications, and operating time) are being compared in patients undergoing maxillary molar extraction with physics forceps and conventional extraction forceps.
Results
The study is under progress and the results are awaited.

EP-DS 21
Evaluation of indications for extraction and association of complications with position of impacted mandibular third molars

Rajashekhar D Gadad

AFMC, Pune

Abstract
Mandibular third molars have the greatest incidence of impaction and their removal is the most frequent dento-alveolar surgical procedure performed by oral and maxillofacial surgeons. The aim of this study was to evaluate the indications for extraction, position of impacted mandibular third molars, and relationship of postoperative complications to the position. The objective was to evaluate the association between complication and the type of impaction angulation and the difficulty index. A total of 100 patients with impacted mandibular third molars were taken for the study who reported to our center from Jan 2013 to Jun 2014. All the patients underwent surgical removal of the impacted tooth. The common indications for removal of impacted mandibular third molar found in our study were pericoronitis, caries and prophylactic orthodontic extraction. Assessment of angulation, position and ramus relationship of impacted mandibular third molar is critical before removal of the tooth to minimize postoperative complications. In our study we did not find any statistically significant difference in the postoperative complications based on the difficulty index. To arrive at a definitive conclusion a study correlating clinical and radiological findings with a larger sample size is required.

EP-DS 22
Atraumatic tooth extraction

Hem Singh

Swami Devi Dayal Dental College & Hospital

Abstract
Nowadays atraumatic tooth extraction is very important in preserving alveolar bone & surrounding soft tissue. Atraumatic extraction & preservation of buccal bone is very important for achieving optimal, functional & aesthetics of future prosthesis/implant. There is increasing demand of lowering damage to hard & soft tissue around the tooth being extracted. These preserved three dimensional bone & soft tissue parameter influence the treatment plan & results in long time prognosis. This poster demonstrates various techniques of atraumatic tooth extraction, its advantages & disadvantages are described.

EP-DS 23
Modified lingual split technique

Pradeep Yadav, Rahul

Harvansh Judge Institute of Dental Sciences

Abstract
In day to day clinical practice we try different methods for different surgical conditions in the most common surgery i.e. third molar surgical extraction. Every procedure has its own advantages and

disadvantages. We have been practicing the lingual split technique with a modification for the lingually placed tooth and have had good results with minimum morbidity and complications. Over the time since the advent of surgical drills and rotary engines, the lingual split bone technique has lost relevance. We have revisited the technique with our own certain modifications. This technique has till now been used in almost 800 patients and we have found it to be very effective, precise and less eventful compared to other technique. and we must play our part in not letting this technique get obsolete or extinct.

EP-DS 24
Tooth Autotransplantation—An Alternative Treatment Option

Tania Sharma

School of Dental Sciences, Sharda University

Abstract
Background
Autogenous tooth transplantation is the surgical movement in one individual of a vital or endodontically treated tooth from its original location in the mouth to another site. This could involve the transfer of impacted, embedded, or erupted teeth into extraction sites or into surgically prepared sockets.
Objective
The objective was to assess the success of this procedure in a young 15 year old boy with an unrestorable grossly decayed lower right first molar tooth post endodontic treatment that was treated with auto transplantation of the erupting left lower third molar tooth into the extraction socket.
Methodology
OPG revealed similar size, shape and mesio-distal width of both teeth and incomplete root formation of the lower left third molar made it a favorable tooth. Atraumatic extraction of the root stumps of the left lower first molar tooth was performed and the sockets slightly widened coronally. Then the opposite side lower third molar was extracted atraumatically and placed within the socket of the lower first molar with minimal handling to preserve the periodontal tissues. The occlusion was checked and adjusted with the use of an air rotor on the occlusal surface of the tooth. A 3-0 vicryl suture was placed over the implanted tooth to maintain position.
Result
After a 2 year follow up the tooth is still vital and well accepted in the new socket. Root formation has also been completed.
Conclusion
Tooth auto-transplantation can be considered as an successful alternative approach in oral rehabilitation for some clinical situations especially in young patients.

EP-DS 25
Role of lasers in oral and maxillofacial surgery

Gaurav Singh, Shubhamoy Mondal, Mohd. Numan

Sardar Patel Post Graduate Institute of Dental and Medical Sciences

Abstract
Background
Since its first experiment for dental application in 1960's, use of lasers has increased rapidly in last couple of decades in contrast to conventional instrumentation and other adjunctive equipment used to enhance surgery.
Objectives
Many different laser wavelengths have many advantages especially high coagulation properties, the incision quality, and the postoperative benefits for the surgeon and the patient.
Methodology
CO_2 laser is the most commonly used and is accepted as an alternative method to the conventional surgical techniques. The dye and Argon lasers can be applied in the removal of vascular lesions. The Ho:YAG laser is the main surgical tool for the TMJ surgery and the Er: YAG laser for the hard tissue removal.
Results
Laser surgery results in better hemostasis, excellent field visibility, precision, enhanced infection control, property of elimination of bacteremia, lack of mechanical tissue trauma, reduced postoperative pain and edema, reduced scarring and tissue shrinkage, microsurgical capabilities, less instruments at the site of operation, asepsis due to non-contact tissue ablation and prevention of tumor seeding.
Conclusion
Use of lasers showed excellent results but further research is needed to investigate the higher efficacy as well as the other side effects of laser therapy, is still needed.

EP-DS 26
An unusually impacted mandibular third molar: a case report

Mukul Padhye, Kopal Vij

D. Y. Patil School of Dentistry, Navi Mumbai

Abstract
Background
It is not uncommon to encounter impacted third molars, particularly mandibular third molars. A routine radiographic examination of a 53 year old male revealed an impacted mandibular third molar in the lower border of the mandible.
Objective
The objective is to report a case of impacted mandibular third molar found in the lower border of the mandible which was palpable extraorally, asymptomatic initially and gradually caused pain on palpation.
Methodology
An OPG and a CBVI were made for better detail of the impacted molar. The impacted molar was removed surgically via a submandibular incision extraorally and curetted.
Conclusion
Patients should be examined throughly and prophylactic removal of the third molars should be considered.

EP-DS 27
Dentocardiac reflex: does it exist?

Venkatesh Anehosur, Kiran Radder, Aakash Kohli

SDM College of Dental Sciences & Hospital, Dharwad

Abstract
Background
Reflex bradycardia and hypotension secondary to stimulation of branches of trigeminal nerve during operations in mid facial region is a well known phenomenon. This phenomenon has been well described in ophthalmology and maxillofacial surgery

literature under various terminologies like trigeminocardiac reflex, oculocardiac reflex, trigeminovagal reflex and Achener phenomenon. This reflex is evoked during a variety of procedures like strabismus surgery, elevation of zygoma, mid facial osteotomies for correction of jaw discrepancies, midface disimpaction and TMJ arthroscopy.

Objective

A recent hypothesis states that this reflex may be operant in maxillary posterior dentoalveolar region which gets activated during extraction of first molars. This reflex is termed the dentocardiac reflex and has been proposed to possibly trigger syncope in patients. This observation led us to postulate an alternative pathway for dentocardiac reflex mediated syncope which may possibly justify the maxillary first molar region as a prone factor for the trigger. This poster attempts to highlight the results of a prospective study performed to confirm the hypothesis and a brief review of literature.

Conclusions

Present hypothesis may not confer the specific factor responsible for switch in autonomic response in syncope origin during the tooth extraction procedure, but may provide a clue to where we should be looking.

EP-DS 28
Influence of tooth sectioning on postoperative pain, swelling and trismus following surgical removal of impacted mandibular third molar

Kaleem

Meenakshi Ammal Dental College and Hospital

Abstract

Background

Our study aims at assessing the quality of life (QoL) of patients undergoing surgical removal of impacted mandibular third molar by tooth sectioning or complete odontectomy. Thereby, every effort can be made to reduce the postoperative morbidity and improve the patient experience for this commonly performed surgical procedure.

Aims and Objectives

To evaluate and compare pain, swelling and trismus in patients undergoing surgical removal of impacted mandibular third molar by tooth sectioning and enbloc removal.

Materials and Methods

The study was conducted on 84 selected patients who were divided into two groups who had undergone transalveolar extraction of third molar without (group I) and with odontectomy (group II) and post operative pain, swelling and trismus were evaluated in both groups.

Results

We found that group I patients had greater pain, swelling and trismus than the group II patients although the difference was not statistically significant.

Conclusion

It is our conclusion that sectioning the tooth is the preferable option when surgically extracting an impacted third molar to reduce the post operative pain, swelling, trismus.

EP-DS 29
Versatility of PRF in maxillofacial surgeries

Sanjay Chandan, Dinesh Yadav

Bharati Vidyapeeth Deemed University Dental College and Hospital Pune

Abstract

The versatility of PRF deals with various maxillofacial surgeries with mighty healing properties, like various maxillofacial defects, implantology, third molar Surgeries.Choukroun platelet-rich fibrin (PRF) is a modification of platelet-rich plasma (PRP). It is an autologous fibrin matrix used to enhance bone regeneration. PRF can be prepared in a simple step, and has more advantages than PRP, such as no chemical additives, reduced production time, and an easy application procedure. The platelet number in PRF is 3 to 7 times more concentrated than normally found. PRF has numerous growth factors, such as platelet-derived growth factor (PDGF), transforming growth factor (TGF), and insulin like growth factor (IGF). PRF (platelet rich fibrin) was first developed in france for use in the field of oral and maxillofacial surgery. Platelet-rich fibrin (PRF) belongs to a new generation of platelet concentrates with simplified processing and without biochemical blood handling. Applications of PRF highlight an accelerated tissue cicatrization due to the development of effective neovascularization, accelerated wound closing with fast cicatricial tissue remodelling, and nearly total absence of infectious events. PRF is a natural fibrin-based biomaterial prepared from an anticoagulant-free blood harvest without any artificial biochemical modification that allows obtaining fibrin membranes enriched with platelets and growth factors.

EP-DS 30
Ozone: An "O- some" irrigant

Rohini V. Kanitkar, Lingaraj Balihallimath, Shridhar D. Baliga

KLES V K Institute of Dental Sciences

Abstract

Over the years different types of irrigant solutions like normal saline, ringers lactate, 1 % providine iodine, have been used for the removal of impacted lower third molar to prevent irreversible bone necrosis caused by the heat generated. Our objective is to evaluate the effect of ozonated water as an irrigant, on post-operative pain, trismus and swelling following the surgical removal of impacted mandibular third molar as compared with conventional saline. This is a pilot study. 30 Patients reporting to the Department of Oral and Maxillofacial Surgery, KLE V. K. Institute of Dental Sciences, Belgaum, from a period of September 2014 to July 2015, who consented to participate, were selected randomly (envelope method) for the study. Ozonated water was used as irrigant in 15 surgical sites taken as study group and in other 15 sites normal saline was used as irrigant taken as control. Medically compromised patients were not included in the study. Patients were alternatively grouped in 2 groups irrespective of age, sex, difficulty in impaction and their response to various drugs to eliminate bias. The follow up was on day 3 and day 7. The results

showed that pain ($p = 0.00001$), trismus ($p = 0.0026$) and swelling ($p1 = 0.0001$, $p2 = 0.0102$, $p3 = 0.00001$) were far less in patients where ozonated water was used as compared to normal saline for day 3. For day 7 they showed pain ($p = 0.7716$), trismus ($p = 0.9339$), swelling ($p1 = 0.3820$, $p2 = 0.3133$, $p3 = 0.3615$). Thus we feel that ozonated water is a superior irrigant. The study is being conducted on a larger sample to confirm the results.

EP-DS 31
Dentoalveolar surgery in children

Amit, Ashish

Dental College Lucknow

Abstract
Dentoalveolar surgery is not very common in child patients. But dentoalveolar fracture is very common in children.

EP-DS 32
Escape Pain Phenomenon (EPP) in Impacted Mandibular 3rd Molar (M3 M) surgery

L. Balamurugan

Ultra's Best Dental Science College, Madurai, Tamilnadu

Abstract
Pain during extraction of mandibular 3rd molar which can occur despite adequate local anesthesia is termed as Escape Pain Phenomenon. This describes the pain during elevation of mesio angular impacted M3 M and also while curetting an extracted 3rd molar socket. EPP speculates the occasional presence of neurovascular plexus (NVP) independent of the inferior alveolar neurovascular bundle (IANB) which causes escape of pain impulses upon stimulation by root pressure or instrumentation. This poster gives a possible explanation for occasional unexplainable pain during M3 M surgery.

EP-DS 33
Retromolar artery—the incidence and significance in the practice of maxillofacial surgery

Vaishnavi, P. Elavenil, Shanmugasundaram, K K Raja

SRM Dental College, Ramapuram, Chennai

Abstract
Background
The retromolar artery is considered a rare anatomical variant in the human mandible and does not find a detailed description in most of the anatomy textbooks. Remarkably our study on this entity revealed a much higher incidence of occurrence.
Objective
The prospective clinical study was designed to achieve a more clear understanding of this structure as well as highlight its clinical significance in the practice of maxillofacial surgery.
Methodology
A sample of 100 patients undergoing mandibular third molar disimpaction was considered for the study. The retro molar artery was identified and dissected in all patients. Its position and diameter was recorded. A thorough review of literature was also performed to enhance our understanding of this anatomical variant.
Results
The incidence of the retromolar artery was established in 98 % of the patients. The diameter varied between 1 mm to 3 mm. The involved nutrient canal/foramen was located at a mean distance of 12–15 mm from the distal surface of the mandibular second molar. This was significantly higher than the earlier reports.
Conclusion
This study clearly establishes the higher incidence of the retro molar artery. Considering its incidence and clinical implications, it should be recognized as a normal anatomic entity and not an accessory artery. The potential role of this artery in the spread of retro molar malignancies and design of flaps must not be underestimated

EP-DS 34
Collate on the ability of physics forceps v/s conventional forceps in multirooted mandibular tooth extractions

AJ Institute of Dental Science, Mangalore

Abstract
Aim
Can physics forceps replace conventional forceps in non- surgical mandibular dental extraction?? The history of dental extractions dates back to the days of Aristotle, in which he described the mechanics of extraction forceps, including the advantages of "two levers acting in contrary sense having a single fulcrum. In the process of a simple extraction, surgeons must exercise a great deal of fineness and a certain degree of controlled force to deliver a simple tooth extraction. Traditional extraction techniques use a combination of severing the periodontal attachment, luxation with an elevator, and removal with forceps. If the tooth is already weakened, or if there is morphological difference, then traditional extraction forceps often cause fracture of the tooth, surrounding bone, or both which can lead to undesirable postoperative sequelae. Recently, a revolutionary new concept and tooling in exodontia the Physics forceps is developed which primarily uses the biomechanical advantages of a first-class lever, creep, and stress distribution without the squeezing, grasping, twisting and pulling forces.

EP-DS 35
Average distance between neurovascular bundle and alveolar crest in coastal Andhra population

S. Gokkulakrishnan, K. Bramara Kumari

GITAM Dental College and Hospital

Abstract
The anatomical landmark of particular interest to maxillofacial surgeons, in and around the mandibular teeth, is inferior alveolar canal as it carries inferior alveolar neurovascular bundle, the damage of which may lead to permanent or long-lasting neurosensory alteration or loss. There are cases reporting of injuries to the inferior alveolar neurovascular bundle following minor and major surgeries. The main aim of this study is to assess and evaluate the distance

between root apices, CEJ at the midline of mesiodistal diameter of the tooth and alveolar crest to the Inferior alveolar Neurovascular bundle at 1st, 2nd and 3rd molars on both sides of mandible and in both genders in coastal Andhra population. This study was done to explain the differences in the measurements for 72 females and 78 males related to age using the OPG techniques. OPG can accurately show the relationship between mandibular molars and mandibular canal in vertical plane, which can help the surgeons make precise surgical plans and reduce the incidence of complications, particularly the risk of damage to the inferior alveolar neurovascular bundle.

Head and Neck Oncology (CODE- EP-HN)

EP-HN 1
Neck dissection in verrucous carcinoma-to do or not to do

Dinesh Verma, Shallu Bansal, Gagandeep Singh

Surendera Dental College and Research Institute, Sri Ganganagar, Rajasthan

Abstract
Verrucous carcinoma is a distinct low grade variant of squamous cell carcinoma of oral cavity. It represents 4.5–9 % of oral SCCs. Surgical treatment is the treatment of choice for the primary lesion with a 5 year survival rate of 85 %. A focus of invasive SCC is seen in 2 % patient akin to anaplastic transformation. Verrucous carcinoma in the setting of PVL is most commonly associated with congruent invasive SCCs. Neck dissections are associated with surgical morbidity like fistula, flap necrosis or shoulder syndrome. However choosing not to do neck dissection in verrucous carcinoma may mean a second surgery, late and unsalvageable surroundings in the neck. It is reasonable to consider selective neck treatment (SOHND) in the situation where there is uncertainity regarding the pathological diagnosis in the face of clinical suspicious lymphadenopathy in this poster the treatment and need for neck dissection in verrucous carcinoma will be discussed.

EP-HN 2
Chondrosarcoma: A rare case report

Ann Mary George, Jagadeesh Chandra, Gunachandra Rai

Yenepoya Dental College

Abstract
Chondrosarcoma is a rare malignant tumour, which arises from cartilaginous tissue or bone derived from chondroid precursors. It accounts about 10–20 % of all malignant bone tumours and its incidence in the head and neck region is even more uncommon, accounting for less than 10 % of all cases, affecting more commonly the mandible, maxilla, paranasal sinuses and nasal cavity. Uncommon head and neck sites, such as skull base and temporomandibular joint, have also been reported. The purpose of this poster is to present a rare case of condrosarcoma of maxilla in a 50 years old male patient who reported to our department with a facial swelling of 2 years duration.

EP-HN 3
Sentinal lymph node: a boon or a sceptism

Nikit Agrawal

Peoples Dental Academy

Abstract
Sentinal lymph nodes are the primary group of lymph nodes, which receives lymphatic drainage from primary specific site. The incidence of occult metastasis in patient with head & neck squamous cell carcinoma is fairly high, benefits from elective neck dissection is fairly low with even increasing morbidity of the patient. Sentinal lymph node biopsy has been proposed as minimal invasive, low morbidity modality able to select patient with occult metastasis who will benefit from neck dissection. Thus, minimizing the morbidity of neck treatment in patient with clinically negative neck. Therefore, the sentinel lymphnode biopsy is an even increasingly employed method for staging N0 NECK. In the following presentation I will be elaborating the review of literature analyzing the merits and demerits of SLNB & our view over the same.

EP-HN 4
Oral myiasis—a case report

Puneet Wadhwani, Iqbal Ali, Rk Srivastava, Gaurav Mathur

Career Postgraduate Institute of Dental Sciences and Hospital

Abstract
A patient with squamous cell carcinoma reported to our department of Oral and maxillofacial surgery. He underwent dissection with hemimandilectomy with neck dissection. He later underwent radiotherapy during his radiotherapy he reported to our department with wound on left side of chin. On examination several maggots were seen. This poster describe a case of oral myiasis to squamous cell carcinoma resection under going radiotherapy. It also discusses the various treatment modalities available for its management.

EP-HN 5
Radiofrequency ablation of head and neck tumors

Ameya Pai, Sima Mazumdar

Terna Dental College & Hospital

Abstract
Treatment options for advanced and recurrent head and neck tumors are toxic, deforming and at times detrimental to the quality of life of the patient. Radiofrequency ablation is an emerging treatment modality for malignant tumors. It is a method of localised hyperthermia resulting in tissue necrosis and thus ablation of the lesion. Previously used for metastatic hepatic carcinomas, it has found applications in various other tumor sites including the head and neck region. Radiofrequency ablation is done by inserting a metal needle probe into the tumor. It can be performed accurately with acceptable level of safety. Lesser operative time, minimal blood loss and lesser hospital stay are some of the advantages. With further experience, it can turn out to be a reasonably safe and feasible modality for palliative treatment of selected head and neck tumors where no other good treatment option exists.

EP-HN 6
Comparison of Schobinger incision & MacFee incision in neck dissection

Venkatesh Anehosur, Gopal Krishnan, Sahana A, Vinay Singh Yadav

SDM College of Dental Sciences & Hospital

Abstract
Following Crile's first radical attempt to use the Y incision for neck dissection in 1906, other kinds of incisions have been described such as Schobinger, MacFee, Hockey stick, Bilateral- HSI, Hayes Martin, J-incision, etc.
Objective
To assess & compare the results of Schobinger & MacFee incisions in oral cancer patients.
Methodology
30 biopsy proven cases of oral squamous cell carcinoma were chosen and divided randomly into two groups i.e Schobinger & MacFee groups and assessed in terms of time taken for raising and closure, accessibility of the neck, damage to important structures, marginal necrosis, dehiscence, infection, wound contraction & scarring.
Results
Time taken to raise & close flap was more in Schobinger group than Macfee group. Accessibility was better in Schobinger group and poor access to posterior triangle in MacFee incision. Higher incidence of dehiscence, marginal necrosis & contracture in Schobinger group whereas better cosmesis and lesser scarring was noted in MacFee group.
Conclusion
Though MacFee incision provides limited access under the bridge during neck dissection, it is better in terms of cosmesis, lesser scarring, marginal necrosis and contracture than Schobinger incision.

EP-HN 7
Evaluation of neck node status in Indian oral cancer patients treated surgically

A. S. Rana, Anshuman Kumar, Gaurav Singh, Ashish Prajapati

Shree Bankey Bihari Dental College, Masuri, Ghaziabad

Abstract
Background
Oral cancer is a heterogeneous group of cancers arising from different parts of the oral cavity, with different predisposing factors, prevalence, and treatment outcomes. More than 90 % of all oral cavity tumors are squamous cell carcinomas. The rate of oral cancer varies from over 20 per 100,000 populations in India, 10 per 100,000 in the U. S., and less than 2 per 100,000 in the Middle East.
Objectives
This study will be continued to evaluate the pattern and frequency of involvement of neck node in Indian oral cancer patients.
Methodology
The patients who are diagnosed with SCC with no evidence of distant metastasis will be taken up for surgical resection with neck dissection under GA. We did 7 cases of SCC from which I am presenting a case of 55 yr old male patient suffering from SCC of lower left buccal mucosa since 2 months.
Result
The pre and post operative data of cases will be collected and analyzed statistically and results are satisfactory.
Conclusion
We need some modification in the surgical treatment of SCC of oral cavity in Indian population in comparison to western population.

EP-HN 8
Digital visual tomography as an accurate measure to assess mandibular invasion in oral squamous cell carcinoma

Swathi D Shetty, Venkatesh Anehosur, Dharani

SDM College of Dental Sciences and Hospital, Dharwad

Abstract
Objective
To determine the diagnostic accuracy of Digital volume tomography (DVT) in comparison with orthopantomography (OPG), computed tomography (CT), clinical presentation and histological study in assessing mandibular bone invasion in patients with oral squamous cell carcinoma clinically adjacent or fixed to the mandible.
Setting
SDM Craniofacial unit, SDM College of Dental Sciences and Hospital, Dharwad.
Study Design
In this prospective study, 21 patients with biopsy proven Oral squamous cell carcinoma received OPG, Dentascan (CT) and DVT (CBCT) imaging presurgically. Exploratory periosteal stripping and direct inspection of resected mandible done intraoperatively. Radiologic evaluations were compared with histopathologic examinations of the resected tumour specimens. Statistical analysis was carried out and the sensitivity, specificity, positive predictive value and negative predictive value were calculated and compared.
Result
The sensitivity, specificity, positive predictive value and negative predictive value for OPG were 36.36 %, 100 %, 100 % and 58.82 % respectively; for Clinical presentation 81.82 %, 100 %, 100 % and 83.83; and for Dentascan 100 %, 90 %, 91.67 % and 100 %; and for DVT 100 %, 100 %, 100 % and 100 %.
Conclusion
DVT (CBCT) can accurately visualize bony involvement by a neoplasm in the mandible at a fraction of the cost of Dentascan (CT) and at a greatly reduced level of radiation. We conclude that DVT can aid in accurate preoperative staging of OSCC, as well as establishing the necessary extent of resection required to produce tumour free margins.

EP-HN 9
Total mandibulectomy in a patient with verrucous carcinoma turning into squamous cell carcinoma of the oral cavity: a rare case report

Chandrashekhar Bande, Mayur J Gawande

Swargiya Dadasaheb Kalmegh Smruti Dental College & Hospital Nagpur

Abstract
Introduction
Oral Verrucous Carcinoma is characterized by predominantly exophytic overgrowth of well differentiated keratinizing epithelium having minimal atypia and with locally destructive pushing margins at its interface with

underlyling connective tissue. It is distinct in its slow growth and ability to become locally aggressive if not treated appropriately.

Method

The author herein reports a case of squamous cell carcinoma arising within verrucous carcinoma of mandible. A 65-year old women reported to hospital with the history of swelling over the gums of lower jaw since 1 yr. Her swelling was painless and gradually had spread to the whole mandible. Incisional biopsy and histopathologic examination revealed verrucous carcinoma which was treated with total mandibulectomy.

Discussion

Verrucous carcinoma tends to destroy bony structures such as the mandible, on a broad front, eroding with a sharp margin rather than infiltrating the marrow spaces. In our case there was associated pathological fracture of right condylar neck of mandible. The prognosis of verrucous carcinoma is generally good since nodal metastases do not occur.

Conclusion

It is mandatory to rule out hybrid carcinoma including verrucous Carcinoma and conventional squamous cell carcinoma. But, in any scenario, timely and correct diagnosis of the lesion and appropriate surgical management is of extreme importance to minimize postoperative morbidity and to improve quality of life of the patient.

EP-HN 10
Metastasis from distant sites: a rare occurrence in mandible

I B Kar, Asst. Niranjan Mishra, Dipti Samal

SCB Dental College, Cuttack

Abstract

Background

Metastatic carcinoma is the most common type of malignant bone tumour. However, metastases to the mandible are rare entities constituting only 1 % of all malignant tumours of the body. The primary lesions are mostly located in breast, lungs and kidney and less commonly in thyroid and prostate. Histologically, adenocarcinoma is the most common variant. 25–35 % of these metastatic tumours may be the first presentation of an occult primary.

Objective and Methodology

To present a review of literature on tumours metastatic to mandible along with two case reports that presented to our department.

Conclusion

Metastatic tumours are signs of advanced stage of disease and have a dark prognosis. Early recognition of the signs and symptoms is important along with multidisciplinary approach to establish appropriate treatment.

EP-HN 11
To evaluate the effectiveness of toluidine blue for obtaining safe margins in oral squamous cell carcinoma

Neelkamal Hallur, Aaisha Siddiqua, Syed Zakaullah, Ashwin Shah, Chaitanya Kothari, Shereen Fatima, Meenakshi Kothari, Juhi Shabnam, Mohammed Wahajuddin

Al-badar Rural Dental College and Hospital

Abstract

Introduction

The incidence of dysplastic changes at the margins of excised lesions is found to be unacceptably high.

Aim & Objective

To identify the margins of oral intra-epithelial neoplasia using toluidine blue staining followed by wide surgical excision of lesion.

Material and Methods

Ten patients diagnosed with oral squamous cell carcinoma, prior to excision, the entire lesion and its surrounding areas were first irrigated with Toluidine blue for 20 s. Then 3 % acetic acid was applied for 30 s to remove mechanically retained stains, Toluidine blue is a basic thiazine metachromatic dye with high affinity for acidic tissue components which stains dysplastic tissues. While excising the lesion, in addition to the 1 cm of safe onco-surgical margin, areas of stained dysplastic tissue were also removed wherever possible. HPR analysis and reporting was done to conclude on the effectiveness of toluidine blue.

Results

On HPR analysis margins of all 10 specimens were found to be free from any dysplastic changes.

Conclusion

Use of toluidine blue decreases the frequency of dysplastic tissue in the resected margin, hence decreasing the recurrence of oral squamous cell carcinoma.

EP-HN 12
Granular cell type ameloblastoma-: a rare case report

C. R. Bande, Vijay Rode

Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital, Nagpur

Abstract

Introduction

Granular cell ameloblastoma is a rare variant of ameloblastoma which accounts for only 5 % of all ameloblastomas as stated by Hartman. Reichart et al. reported a 33.3 % recurrence rate for granular cell ameloblastoma, which was higher, compared to the more common follicular, plexiform, and acanthomatous subtypes.

Patient and Method

In this case report, there is intraorally a fibrous tissue growth in the buccal posterior region was seen approximately 3–4 cm in size with round to oval shape, with a reddish color and regular surface. Swelling was firm in consistency with well-defined borders. Patient gave a history of mandibular resection for ameloblastoma of left side 5 years back. Incisional biopsy was done in which the diagnosis was given as recurrent ameloblastoma -granular cell type. Considering the lesion within the soft tissue the surgical treatment modality was planned as excision of the ameloblastoma. The surgical procedures were carried out under general anesthesia with excision of the lesion with soft tissue reconstruction with pectoralis major myocutaneous flap and reconstruction plate was placed. Follow up of patient was done for 2 years.

Results

Reconstruction with PMMC yield a good result with satisfactory healing without any recurrence.

Conclusion

Ameloblastoma in the extragingival location, i.e. in the buccal mucosa are extremely rare. Granular cell ameloblastomas may rarely behave in a malignant fashion giving rise to metastasis. So thorough case history and histopathological investigation is mandatory.

EP-HN 13
To evaluate the effectiveness of lugol's iodine for obtaining safe margins in oral squamous cell carcinoma

Neelakamal. H. Hallur, Aaisha Siddiqua, Syed Zakaullah, Ashwin Shah, Chaitanya Kothari, Shereen Fatima, Meenakshi Kothari, Juhi Bendigeri, Rajarshi Basu

Al-badar Dental College & Hospital, Gulbarga

Abstract

Introduction

This study was conducted to identify the margins of the oral intra-epithelial neoplasia using Lugol's Iodine staining followed by surgical wide excision of lesion. Lugol's Iodine being glycophilic stains the normal healthy mucosa to a mahogany brown colour, whereas, the dysplastic areas having lesser glycogen content remain unstained.

Methodology

11 patients diagnosed with oral squamous cell carcinoma were taken up for study. Prior to the commencement of the surgery, the entire lesion and its surrounding areas were first irrigated with Lugol's iodine. While excising the lesion, in addition to the 1 cm of safe oncological margin, areas of non-stained parakeratinised stratified squamous epithelium adjacent to the invasive tumour were removed where it deemed possible. Biopsy reports were then considered to conclude on the effectiveness of Lugol's iodine in achieving safe resection margins.

Results

Out of the 11 patients considered, 1 patient had positive margin and 10 patient's histopathological analysis reported safe margins. To conclude, use of Lugol's iodine to stain the lesion helped decrease the frequency of dysplastic tissue in the resected margin, hence decreasing the recurrence of the disease.

EP-HN 14
Tumor thickness is not a predictor for nodal involvement

Surbhi Munjal, Ravi. V, Vidhyadharan S, Subramania Iyer, Krishnakumar Thankappan

Amrita Institute of Medical Sciences

Abstract

Only few studies in literature have focused on the predictive value of tumor thickness in squamous cell carcinoma of buccal mucosa (SCCBM). The purpose of this study was to analyze the predictors of nodal involvement (identified as positive lymph node declaration; PLND, by either pathological positivity on immediate neck dissection or by any neck recurrence) and survival outcomes.

Methods

A retrospective study of 112 consecutive patients of squamous cell carcinoma of buccal mucosa (T1–T4) treated with surgery and appropriate adjuvant therapy. A receiver operating curve (ROC curve) analysis was done to predict thickness as a factor for PLND and to find out a cut off thickness. Univariate and Multivariate analysis was done including other factors to analyze the predictors of nodal involvement, overall survival and disease free survival. Chi-square test and binary logistic regression and Kaplan Meir curves were used.

Results

The mean age of the patient's was 57.6 years. All the patients underwent wide local excision with neck dissection. 29 patients took adjuvant radiation therapy and 33 took chemo-radiation. 38 patients (33.9 %) had pathological nodal involvement (pN+). After a mean follow up for 25 months, 37 patients developed recurrence (33 %). Among the 37 patients, 16 patients (14.3 %), had nodal recurrence. 47 patients (42 %) had PLND. On ROC curve analysis, true depth of invasion was found not to be a predictor of PLND. Hence, no cut off thickness was calculated. On univariate analysis for PLND, lympho-vascular invasion (LVI) and peri-neural invasion (PNI) were identified as predictors of PLND. On Multivariate analysis, peri-neural invasion (PNI) remained independently predictive ($p = 0.004$, HR 4.108, 95 % CI, 1.564 10.792). On Kaplan "Meier analysis, the 5-year overall survival was 49.5 % and 5-year disease free survival was 51.5 %. On multivariate analysis, for overall survival and disease free survival, pN+ was identified as an independent predictor.

Conclusion

In SCCBM, the depth of invasion is not a predictor for nodal involvement. Pathological nodal positivity is an independent predictor for both, verall and disease free survival.

EP-HN 15
Adenoid cystic carcinoma of floor of the mouth: a case report

Naresh Kumar, Akhilesh Singh, Arun Pandey

Abstract

Background

Salivary gland neoplasms are diverse in nature and present with variable clinical and histological characteristics.. Adenoid cystic carcinoma was first coined by billroth as cylindroma and it constitutes about 10 to 15 % of the salivary gland tumors. It occurs most commonly in minor salivary glands and the submandibular salivary gland and rare in the sublingual and parotid gland. Adenoid cystic carcinoma (ACC) is an aggressive tumor and is characterized by perineural invasion and late development of distant metastases.

Objective

Here we present a case report of adenoid cystic carcinoma involving floor of the mouth.

Methods

A 55 year old female patient reported to our unit with well defined, firm & non tender swelling in right side of floor of the mouth, managed with wide surgical excision.

Result

Healing was satisfactory on follow up with no signs of recurrence. Histopathological examination revealed Adenoid cystic carcinoma. At present patient is undergoing post operative radiotherapy.

Conclusion

Management of the adenoid cystic carcinoma remains challenging for the surgeon as role of neck dissection and adjuvant chemotherapy remains debateful. It has been advocated by many authors to perform neck dissection in neck positive patients, still aggressive surgical excision of the tumor mass followed by post operative radiotherapy remains the treatment of choice.

EP-HN 16
Unpredictive behaviour of malignant tumors in mandible

Reena John, Mds, Richard Wilson

Vinayaka Missions Sankaracharyar Dental College

Abstract
Primary intraosseous carcinomas are unique tumors exclusively in jaws. These tumors arise at younger ages. It is an epithelial odontogenic malignancy arising from odontogenic epithelial residues in a bone. Oral Squamous Cell Carcinoma is a genetic disease in which the genes that control cell growth and apoptosis are mutated, allowing cells to acquire the ability to invade and metastasize. Their mutation results in uncontrolled cell proliferation. Percentages of morbidity and mortality in males are 6.6/100,000 and 3.1/100,000 respectively, while in females the same percentages are 2.9/100,000 and 1.4/100,000. In this poster, clinical, radiological and histopathological features of two patients are discussed along with surgical resection and reconstruction of the defect using PMMC flap and review of literature.

EP-HN 17
Is there a need for elective neck dissection in T1T2N0 Squamous cell carcinoma of the maxillary gingiva, alveolus, and hard palate

M. Bhaskaran, S. Sindhuja Devi

Rajas Dental College and Hospital, Tirunelveli

Abstract
Background
All SCCs with a mucosal element have the potential risk to metastasise to regional lymphnodes. Elective treatment of the regional nodes is widely accepted in such patients when the risk of occult metastases exceeds 15–20 %. Unfortunately there are few prospective studies that have investigated the risk of occult regional metastases in SCC of the maxillary gingiva, alveolus, and hard palate.
Objective
The purpose of this study was to evaluate the need to do elective neck dissection in SCC of the maxillary gingiva, alveolus and hard palate.
Methodology
Details of patients who were treated between 2000 and 2014 for T1T2N0 SCC of the maxillary gingiva, alveolus, and hard palate were retrieved from our database. They included site of the primary SCC, nodal status on initial presentation, type of treatment, pathological stage, recurrence, regional or distal metastasis, and outcome.Also review of the existing literature about the need for elective neck dissection was done.
Results
All patients were free of tumor recurrence in the mean follow-up of 7 years.
Conclusion
Based on the surgeons experience with management of T1T2N0 squamous cell carcinoma of maxilla and a review of the existing literature, we recommend the wait and watch method for management of cervical metastases. Though recently, literature favouring elective neck dissection is published in increasing numbers, a critical evaluation of the literature reveals that the number of T4 cases included in these studies are proportionately large.

EP-HN 18
Free tissue transfer: a gold standard in maxillofacial reconstruction

Ishita Sinha

College of Dental Sciences, Davangere

Abstract
Head and neck cancer refers to a group of biologically similar cancers originating from the oral cavity, nasal cavity, paranasal sinuses, pharynx and larynx. Most head and neck cancers are squamous cell carcinomas originating from the epithelium of these regions. They are frequently aggressive in their biologic behavior, and many patients present with advanced disease requiring reconstruction of the surgical defects to prevent functional and cosmetic issues. Furthermore, the head and neck region is one of the most difficult areas to reconstruct because it has complex anatomic, functional and physiologic interactions. Thus, many reconstructive techniques for surgical defects have been developed. Thirty years ago, many cancers could not be removed because a method did not exist to put things back together in a meaningful way. Thus, reconstructive options were limited, and below-optimal cosmetic and functional results were expected side effects. But, the use of free tissue transfer has allowed the reconstruction of increasingly complex defects in higher risk patients after head and neck cancer resections. Microvascular head and neck reconstruction is a technique for rebuilding the face and neck using blood vessels, bone and tissue, including muscle and skin from other parts of the body. The technique is one of the most advanced surgical options available for rehabilitating surgical defects that are caused by the removal of head and neck tumors and has greatly improved the cosmetic and functional outcomes in these patients. It has allowed surgeons to operate on patients who previously were considered inoperable," since most cancer defects can now be puzzled back together with free flaps.

EP-HN 19
Basal cell carcinoma (bcc) of melolabial region associated with myiasis infestation

Vishal Bansal, Prajesh Dubey, Ali Atif

Subharti Dental College

Abstract
Basal cell carcinoma (BCC) is the most common cutaneous neoplasm worldwide with an incidence of 35–40 % in Caucasians and 2–4 % in Asians. In India the overall incidence of skin cancer is <1 %, BCC being extremely rare as compared to squamous cell carcinoma (55.8 %). The aim of the present case report is to highlight the occurrence of myiasis associated with BCC and also to highlight the comprehensive management for such cases. An 85 years old male patient reported in our maxillofacial OPD with a wound at the right melolabial region secordarily infected with myiasis. Orofacial myiasis is a rare entity, and is mostly associated with various medical and

anatomical conditions, such as neglected mandibular fracture, lip incompetence, cerebral palsy, poor oral hygiene, suppurative lesions, and cancerous wounds. Initially infected wound was managed by oral dosage of broad spectrum antihelmintic (Albendazole 400 mg; Ivermectin 6 mg) in addition to surgical debridement of infected tissue. Maggots were removed after application of turpentine oil. CT findings displayed no bony involvement but the biopsied tissue from the base of infected wound confirmed the diagnosis of BCC. After 3 weeks when infection was controlled and general condition of the patient had improved, supraperiosteal wide excision with 5 mm margin was performed under GA. An approximately 5×6 cm defect on melolabial region and cheek was reconstructed by inferiorly based transpositional flap. Six month postoperative healing was uneventful and esthetically satisfactory. Patient is kept on regular follow up.

EP-HN 20
Photodynamic therapy in the management of lesions of the head and neck

Sudeep Upadhyay, Suresh Kumar

Meghna Institute of Dental Sciences

Abstract
Photodynamic therapy is a promising and effective treatment for lesions of the head and neck. It uses illumination with light of a specific wavelength, which activates a photosensitising drug in the presence of oxygen. It can be used in combination with other treatments or on its own, and results in the cellular destruction of the lesion through a free-radical process. Photosensitisers can be applied topically or given systemically depending on the lesion being treated. Results indicate that PDT is an effective adjunct to standard conventional treatments. An important advantage is that it can be repeated as often as required; other advantages include low toxicity of the agents used.

Implantalogy (CODE-EP-I)

EP-I 1
Bioimplant- respects the anatomy without altering it

Rushik Raval

Maharaja Gangasingh Dental College and Research Centre

Abstract
Background
Current dental implant strategies that work profitably in delayed implantology have serious confines regarding functionality and esthetic outcome in immediate implantology. Bioimplant, a new innovation advocates for individualized zirconia implants.
Objective
The objective of the bioimplants in immediate implantology is to maintain the architecture of the fresh extraction socket.
Methodolgy
The target tooth is atraumatically extracted. The root of the extracted tooth or an impression of the extraction socket serves as basis for the production of the individualized immediate implant. Macro-retentions, strictly limited to the interdental space, are designed, the buccal and lingual face is slightly reduced and a crown stump is constructed for later connection to the crown in the laboratory. The prepared root is then laser scanned and the implant milled from a medical-grade Zirconia block, the surface roughened by sandblast and sintered for 8 h to achieve the desired mechanical properties. Thereafter, the implant is cleaned in an ultrasonic bath containing 96 % ethanol for 10 min, packaged and steam sterilized. Within 10 h the customized root analogue implant is ready for use.
Conclusion
The novel immediate Zirconia dental implant closely resembles the natural tooth with respect not to alter the underlying anatomy of the extraction socket and does not require any additional intensive surgical interventions. This minimal invasive method enhances patient acceptance and treatment outcome. Research shows that such a procedure has definite validity and potential for the future of ceramic implantology.

EP-I2
Comparison of crestal bone level changes surrounding immediate and delayed implants: a randomized clinical trial

Niharika Bishnoi, Dinesh kumar Verma, Shallu Bansal

Surendera Dental College and Research Institute, Sriganganagar

Abstract
Introduction
The advent of new implant system, the propagation of new and improved diagnostic procedure and the introduction of novel surgical technique has revolutionized the field of implantology. Preservation of peri-implant bone is one important factor for success, as it not only affect implant osseointegration, but also for esthetic outcome of treatment.
Material and methods
A total of 60 patients were enrolled in the randomized controlled trial.patients were randomly allocated to two groups immediate (Im) and delayed group (Dm) with or without bone graft. Assessment of peri-implant marginal bone level is done preoperatively, immediate, postop, 3rd month postop and 6th month post operatively.
Results
Implants were evaluated for crestal bone level changes. A statistically significant difference in respect to crestal bone level was found between the two groups (Im and Dm) with bone graft at the time of 3 month and 6 month postoperatively.
Conclusion
Assessment of peri-implant marginal bone has become an integral part for evaluation of success of implant. Study concluded with similar and high success rates in both the groups it is possible to choose the placement protocol.

EP-I3
Zygomatic implants in maxillofacial surgery: an overview

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Abstract
Prosthetic rehabilitation with implant-supported dental bridges in the atrophic edentulous maxilla presents a challenge for any treatment

team. Over the past few decades, various bone augmentation techniques such as sinus floor augmentation and onlay bone grafting have been described to enable implant placement in the resorbed edentulous maxilla. Efforts have also been made to pursue alternatives to grafting procedures in achieving osseointegrated implant anchorage using the remaining native bone from anchorage sites such as tuberosities, pterygoid plates, zygoma etc. The zygomatic implant represents one such non-grafting alternative for the oral rehabilitation of these patients. Another indication for these implants is maxillary posterior defects that occur after tumor resection or trauma, and which are challenging to reconstruct and rehabilitate. They are self tapping screws which are inserted through the posterior alveolar crest and maxillary sinus to engage the body of the zygomatic bone. Survival rate of these implants is >90 % and they are associated with minimal complications. Here we present a brief overview on the indications, techniques and possible complications associated with the use of zygomatic implants in maxillofacial surgery.

EP-I4
Ridge split technique for implant placement

Rupanzal

Swami Devi Dyal Hospital and Dental College

Abstract
Implant based prosthesis is the norm rather than the exception in the current scenario. Narrow alveolar ridge remain a serious challenge for the successful placement of endosseous implants. Augmentation of such ridge by splitting is a modality increasingly used to overcome this situation. This poster demonstrates various techniques for widening the atrophic ridge by splitting the alveolar bone and simultaneous placement of dental implants. The advantages and disadvantages of each technique is described.

EP-I 5
Immediate (post extraction) placement of implant—eliminating the aesthetic lag

Pallavi Sarve, Deepak Kulkarni

D. Y Patil Dental Collge and Hospital, Pimpri Pune

Abstract
Background
The replacement of missing teeth with implant borne restorations has become a treatment modality accepted by the scientific community for fully and partially edentulous patients. Recent reports have demonstrated the successful placement of dental implants into the fresh extraction socket in the anterior as well as in molar regions, due to modification in implant surface.
Objectives
This poster highlights the technique and advantages of immediate placement of implants after extraction followed by immediate loading. The criteria chosen by the patient were guided by the following parameters: Prosthetic rehabilitation is the chosen treatment, Absence of pathologies that can nullify or invalidate the bone healing, Presence of soft tissue in stable condition.
Methodology
Two different approaches for immediate loading of dental implants are currently known. The first approach relies on the compression screw principle. The second approach is to establish cortical anchorage of thin screw implants. Excellent primary stability can be obtained along the vertical surfaces of these implants with no need for corticalization. Implants of this type are, therefore, well suited not only for immediate loading but also for immediate placement.
Conclusion
A global vision of odontology for the patient that can benefit from a less invasive operation, in less time with immediate satisfaction for the aesthetic element.
Result
Successful implant placement.

EP-I 6
Platelet rich plasma v/s platelet rich fibrin (prp v/s prf)

Madhumati Singh; Shruthi R. Ranjeeta Yumnam

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Abstract
PRP is a concentrate from blood that contains approximately 3–4 times more platelet than the normal concentration of platelets in human blood. PRP promotes several types of cell including inflammation, proliferation & remodeling all of which are necessary in wound healing. These are 1st generation platelet concentrations. They are used in sports-injury, maxillofacial surgery, implants. Overcoming the restrictions related to the reimplantation of blood derived products, a new family of platelets concentrate which is neither a fibrin glue nor a classical platelet concentrate was developed. The second generation is called PRF, it has been widely used to accelerate soft & hard tissue healing, its advantage over PRP is ease of preparation and lack of biochemical modifications, favourable healing due to slow polymerization, more efficient cell migration and proliferation, supportive effect on immune system, helps haemostasis. But it needs to handle quickly after the blood collection and amount available is low because of autologous blood. The purpose of the poster is to compare the clinical uses, advantages and disadvantages of PRP & PRF.

EP-I7
Zygomatic Implants

Karuna Mehlawat

PDM Dental Collage and Research Institute

Abstract
Zygomatic implants were first introduced by Branemark in 1988 which are specially suitable for patients with advanced atrophy of maxilla, reconstruction of maxilla after tumor resection and failure of bone grafting procedure. These implants have suitable anatomical structure for placement as it crosses four cortical bones i.e. alveolar ridge crest, sinus floor, roof of maxillary floor and superior border of zygoma. Hence have been recommended to provide optimal solution for this complex problem. Traditional technique has palatal emergence of implant crossing the maxillary sinus and disrupting integrity of scheinder membrane, also effecting the patients ability to speak. Therefore to preserve the integrity of scheinder membrane, sinus slot approach was introduced by Stella and Warner in 2000. In this technique implant goes through lateral wall of sinus, consequently

placement is more vertical and better buccal emergence. The advantage of this technique over Branemark approach is reduced the post surgical time, small anatomic disturbance, reduced risk of sinusitis and ecchymoisis, high survival rates and low incidence of complications.

EP-I 8
Direct & indirect sinus lift -a case series

Aziz Pahadwala

D. Y. Patil Dental College & Hospital

Abstract
Dental implants are used to replace both the form and the function of missing teeth. To be a candidate for the dental implant procedure, a patient must have sufficient bone in the maxillary ridge to support these implants. Anatomic limitations often associated with the posterior maxilla are flat palatal vault, deficient alveolar height, inadequate posterior alveolus, increased pneumatization of the maxillary sinus, and close approximation of the sinus to crestal bone. To increase the amount of bone in the posterior maxilla, the sinus lift procedure, or subantral augmentation, has been developed in the mid 1970 s. It is well-accepted techniques to treat the loss of vertical bone height (VBH) in the posterior maxilla performed in two ways: A lateral window technique and an osteotome sinus floor elevation technique and placing bone-graft material in the maxillary sinus to increase the height and width of the available bone. In this study we performed series of cases on direct and indirect sinus grafting. Two technique procedures, the classic lateral antrostomy and the more conservative crestal approach. Lateral antrostomy allows for a greater amount of bone augmentation to the atrophic maxilla but requires a larger surgical access. The crestal approach is minimally invasive but permits only a limited amount of augmentation. Therefore, practitioners should select the type of procedure appropriate to the particular clinical needs.

EP-I 9
All on four implant treatment concept

Rajesh Kshirsagar

Bharati Vidyapeeth Deemed University Dental College & Hospital

Abstract
The edentulous condition has been shown to have a negative impact on oral health related quality of life and conventional dentures have shown only marginal improvement compared to implant supported prosthesis. Resorbed mandible becomes a limiting factor for placement of implants beyond mental foramen and cantilever prosthesis exceeding 7 mm doubles the compressive force on distal most implant. This can be overcome by simply tilting the distal most implant. The all on four concept was developed to provide edentulous patients with an efficient and effective restoration using only four implants to support immediately loaded full-arch prosthesis. Two straight implants in the anterior and two angled implants in the posterior region are used for full arch prosthesis. Angled posterior implants helps avoid relevant anatomical structures, offer better anchorage by engaging in better quality bone and improved support to prosthesis by reducing the cantilever. It eliminates need of grafting by increasing bone to implant contact. After successful osseointegration of these implants various prosthetic options are available. These include fixed provisional (metal reinforced) acrylic prosthesis, Fixed final prosthesis: implant bridge in titanium with acrylic veneering, or individual crowns cemented to bridge frame work; Removable final prosthesis: overdenture on an implant bar over denture. The All-on-Four treatment concept can be considered a viable treatment concept for patients presenting with edentulous arches.

EP-I 10
Efficacy of PRF membrane in immediate implant placement in bony defects

Deepali Sharma

DJ College of Dental Science and Research, Modinagar

Abstract
Platelet Rich Fibrin (PRF) is a fibrin matrix in which platelet cytokines, growth factor and cells are trapped and may release after a certain time and that can serve as a resorbable membrane. Our objective was to use PRF as a membrane in immediate implantation and bone augmentation procedure in a 16 year female who came with a complaint of repeated endodontic failure in maxillary left lateral incisor. Periapical abcess and the two walled bone defect was corrected using platelet rich fibrin. By showing promising results, PRF has proven to be a reliable resorbable membrane material.

EP-I 11
Clinical and radiographic evaluations: early loading of short implants-a short term prospective study

Piyush, Girish. B. Giraddi

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Abstract
Purpose
The purpose of the study was to evaluate the efficacy of early loading of short dental implant as tooth replacement at periodic time intervals for three months.
Method
A clinical prospective study was done in 10 patients of age group 25–60 years with atrophic alveolar ridges. Short dental implants (10 mm) were installed and early loading of implants at the end of 2 weeks of placement was done. The implants had more than 35Nm torque for all patients. Clinical and radiographic analysis was done to evaluate the peri-implant soft tissue and crestal bone level post-operatively at 2nd, 4th, 8th and 12th weeks.
Results
The survival rate of the installed implants was 90 %, as one out the ten implants failed. The mean marginal bone loss after loading was encountered to be 0.357 Â± 0.223 mm mesially and 0.386 Â± 0.194 mm distally at the end of 12th week post-operatively. Implant mobility was found to be statistically non-significant. Also there was significant reduction in gingival index, plaque index and bleeding on probing.
Interpretation & Conclusion
Short dental implants (10 mm) loaded early (after 2 weeks) during healing yield high survival rates. It must however be noted that

patient selection and primary stability of implants plays a crucial role in the success of early loading of short dental implants. Longer observation periods are needed to draw more definite conclusions on the reality of early loading of short implants supported prosthesis.

EP-I 12
Immediate implant placement after lateral approach in maxillary sinus lift

Sarthak Dahiya

D. Y. Patil University, School of Dentistry

Abstract
Purpose
The present study was undertaken to retrospectively evaluate the status of implants in patients subjected to a lateral approach in maxillary sinus lift.
Patients and Methods
22 implants were placed in 10 patients from 2013 to 2015. Lateral approach for the trap-door, open-window method for sinus lifting allogeneic bone substitute was carried out. We have included 5-mm of the minimum bone level was required in the alveolar ridge for the sinus lift. All implants were placed synchronously with sinus lifting procedure. Patients underwent strict oral hygiene instruction, periodontal charting, presurgical/postsurgical panoramic radiographs, and postsurgical computed tomographic scan during the follow-up. The implant survival was defined when the prosthesis had been delivered and followed for 1 years without infection, pain, or more than 2-mm peri-implant bone loss.
Results
Ten patients an average age of 55 years old, with a total of 22 fixtures were followed for 1 yr. After prosthesis delivery. No patients developed sinusitis or other complications leading to loss of an implant subsequent to performance of the sinus lifting-combined immediate implant surgery. The 1 year survival of fixture was 100 %. Increases in lifted sinus bone height ranged from 3 mm to 9 mm with an average of 4.5 mm. The peri-implant health was judged to be good with a peri-implant sulcus depth of 2.7 ± 0.5 mm at 1 year follow-up.
Conclusions
A good survival rate was observed in the immediate implant placement synchronously with the lateral approach for maxillary sinus lift without bone grafting.

EP-I 13
Creating a path: guided bone regeneration

Sanidhya Surana

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Abstract
Guided bone regeneration is a reconstructive technique that uses a barrier membrane to create and protect a space in which wound healing can occur to augment a previously collapsed edentulous ridge. The application of GBR was introduced by Tinti and Parma-Benfenati in 1998. It can be performed before implant placement, when there is not enough bone for initial stability of implants and less predictable outcomes (staged approach), or performed simultaneously with implantation (combined approach). GBR techniques have been used for vertical and horizontal ridge augmentations with acceptable results. The purpose of this poster is to present various materials and techniques of guided bone regeneration and their applicability in implant surgery

EP-I 14
Evaluation of effectiveness of use of negative pressure system in the sinus membrane lifting operation

Girish B Giraddi

Government Dental College & Research Institute, Bangalore

Abstract
Purpose
To evaluate the effectiveness of use of negative pressure system in the Sinus Membrane Lifting Operation.
Patients and Methods
In this prospective study, 10 sinus lift procedures were carried out and gain in alveolar bone height was evaluated over a period of 3 months. After creating a rectangular bony window, negative pressure inside maxillary sinus was maintained by the help of suction tube. Sinus lining was then lifted superiorly starting from lower limit of the cavity towards the lateral wall of the sinus with Lucas curette modified. Bony graft and implant was placed later following standard surgical protocol. Orthopantomogram were taken preoperatively, immediate to procedure, at the end of 1 and 3 months for evaluation of bone height. P value <0.05 were considered as significant.
Results
Immediate to surgical procedure bone height was observed 17.60 Â± 1.07 mm, which reduced to 11.10Â±2.64 mm at the end of 3 months. No post-operative complications like pain, swelling, wound dehiscense and graft extrusion were reported.
Conclusion
Effectiveness of this technique can be explained by increased visualization of the membrane bone junction, increased graft space and sufficient gain in bone height for successful placement of implants.

EP-I 15
To compare the implant planning using the kodak imaging software 9.07/greater (Carestream Health, Inc.)& nobel clinician

Praveen Kumar

Meenakshi Ammal Dental College

Abstract
Methodology
Number of patient 10 patient (5 patient partially dentulous, 5 patient edentulous) To compare the different aspect using 2 software Height, width, angulation, safe zone, number of implant, evaluation of bone availability.
Result
Implant planning through nobel clinician software is superior in following aspect- 1) User friendly solution for diagnostics, treatment planing patient communication 2) Predict treatment outcome 3) Shorten surgical time 4) Gain more treatment acceptance 5) Work on preferred computer 6) More feature in software 7) Work together with your lab technician 8) Visualize what you need to see 9) Increase

treatment efficiency with the integrated treatment workflow. As compare to nobel clinician the Kodak imaging software 9.07/greater (Carestream Health, Inc.) easily accessible.

Conclusion

With increasing implant dentistry it became essential how to plan the implant for better predictability in surgery & safer treatment modality which is beneficial to patient & help to increasing longevity of implant.

EP-I 16
Modified alveolar split osteotomy: a novel technique to rehabilitate resorbed alveolar ridges

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Faculty of Dental Sciences, SGT University

Abstract

Alveolar ridge resorption is a common problem encountered in rehabilitation of partially edentulous patients. Since an adequate bone volume is needed for long-term implant stability, alveolar reconstruction is thus mandatory for an aesthetically uncompromised rehabilitation. The alveolar bone volume at deficient sites can be augmented by using a grafting material, GBR, revascularised bone grafts or distraction osteogenesis. There are few disadvantages to these: limited amount of bone; membrane displacement and collapse (in GBR); inadequacy of the distraction vector and prolonged time for implant placement. Primary stability of implant plays a major role in successful osseointegration for which alveolar bone splitting and immediate implant placement have been proposed for patients with severe atrophy of the maxilla and mandible in the horizontal dimension. The use of modified alveolar split osteotomy technique and studying the stability of implants by RFA in maxilla and mandible is a relatively new method that needs to be assessed further. In this presentation we have included 3 patients having narrow alveolar crests. All were treated with modified alveolar split osteotomy in which the cephalad ends of the vertical cuts are connected with a horizontal corticotomy. The advantage with this procedure is that the vertical cut depth can be controlled and intact cancellous bone can be preserved.

EP-I 17
Immediately placed dental implants in smokers with PRGF & without PRGF: a comparision

Shilpi Gangwar; U. S Pal

King George Medical University; Lucknow

Abstract

Background

Ever since the introduction of the concept of osseointegration, implants have gained significant ground in the field of dentistry. Osseointegration being the main stay in implant dentistry, has been the ultimate goal for the dentists to achieve & one of the pre-requisites for this to happen is that the immediate milieu around the dental implants must be conducive for proper healing & tissue regeneration. Since smoking has been associated with higher potential failure around implants, bone grafting is common requirement either before or after implant placement in humans. In regenerative medicine PRGF has been used to promote the healing & also has been added to bone graft to improve the success rates. PRGF has certain growth factors which have shown to enhance & accelerate soft tissue repair & bone regeneration. A preparation of PRGF applied to an implant adheres to metal & might create a new dynamic surface that could potentially show biologic activity & help in improving the success rates achieved with dental implants.

Aims & Objectives

1. To access failure rate of dental implants in smokers. 2. To evaluate the added advantage of PRGF in immediate placement of dental implants in smokers.

Material & Methods

The present study shall comprise of 30 patients attending OPD of Oral & Maxillofacial surgery & Prosthodontics, King George Medical University, Lucknow. All the subjects will be randomly divided in to two groups after obtaining written consent.

EP-I 18
Evaluation of the success of platelet rich fibrin as a sole grafting material for sinus floor augmentation with simultaneous implant placement—a computed tomographic study

Neelakamal Hallur, Aaisha Siddiqua, Syed Zakaullaha, Ashwin Shah, Chaitanya Kothari, Shereen Fatima, Juhi Bendigeri, Sumaiyya Patel

Al- badar Rural Dental College and Hospital, Gulbarga, Karnataka

Abstract

Introduction

Ridge resorption and sinus pneumatization in atrophic posterior maxilla can compromise implant rehabilitation in a patient. To increase the amount of bone in such cases, sinus floor elevation using various graft materials such as autogenous and autologous grafts, allografts, xenografts, alloplastic materials etc which possess osteoconductive and osteoinductive properties have been advocated. Platelet Rich Fibrin in the form of a platelet gel can be used alone or in conjunction with bone grafts. PRF is an autologous fibrin matrix containing all the properties of whole blood.

Aim and objective

To evaluate the success of platelet rich fibrin as a sole grafting material for sinus floor augmentation with simultaneous implant placement.

Materials and methods

10 implants in posterior resorbed maxillary alveolar ridge who fulfilled the inclusion criteria were placed. Radiographically preoperative and post-operative bone height was measured with CT scan after six months follow up and implant stability was evaluated clinically.

Result

Satisfactory bone height was achieved in all the cases with an average increase of 7 mm with 100 %success rate for implant osteo-integrationand clinical stability.

Conclusion

Thus sinus floor elevation with simultaneous implant placement using PRF as a sole grafting material promotes natural bone regeneration.

EP-I 19
Horizontal bone augmentation in deficient alveolar ridges

Shihiji Srivastava, Mukul Padhye

D. Y. Patil University, School of Dentistry

Abstract
Background
The placement of endosseous implants in edentulous areas is frequently limited by inadequate bone volume of the residual ridge.
Objective
This review evaluated the success of different surgical techniques for the reconstruction of edentulous deficient horizontal alveolar ridges and the survival/success rates of grafts placed in the augmented areas.
Methodology
30 cases done at our institute with mean follow up of 6 months were included. The procedures considered were: onlay bone grafts, Khoury technique, split ridge, sandwich technique, bone shield and mesh. Success and related morbidity of augmentation procedures were analyzed.
Results
A total of 30 cases were reviewed. However, it was difficult to demonstrate that one surgical procedure offered better outcomes than other.
Conclusion
Every augmentation procedure requires substantial planning and different augmentation technique. Every surgical procedure presents advantages and disadvantages. Priority should be given to those procedures which are simpler and less invasive, involve less risk of complications, and reach their goals within the shortest time frame.

EP-I 20
Role of implants in free nonvascularized bone grafts

Ritesh rajan, Abhinanad, Y. Harikanth Reddy

SVS Institute of Dental Sciences

Abstract
Restoration of dental occlusion and articulation in tumour patients is one of the most difficult tasks in oral rehabilitation. Endosseous implants in autogenous bone grafts have found widespread use for oral rehabilitation after loss of mandibular and maxillary bone. Endosseous implants have been placed into these bone grafts either simultaneously at the time of grafting or secondary to graft healing. Nonvascularized grafts allow for satisfactory contour restoration in segmental reconstructions of the mandible. Implants placed into these grafts provide a reliable basis for dental rehabilitation. Endosteal implants have opened up a new perspective in oral rehabilitation, by providing tissue-integrated anchorage for dental prostheses. With their increasing use in oral rehabilitation subsequent to ablative oncologic surgery, endosteal implants have nowadays become a mainstay for the functioning of prosthetic devices in tumour patients. In this poster presentation, advantages, complications and our experiences is discussed.

EP-I 21
Autogenous bone grafts

Prakhar Katta

Mahatma Gandhi Dental College & Hospital

Abstract
Background
Autogenous osseous grafts have been used to restore these defects such as cleft palate, facial clefts, facial asymmetry, implant rehabilitation, and facial fractures.
Objectives
To evaluate the clinical outcome of implants and implant-supported prostheses placed in the reconstructed areas.
Methods
A consecutive retrospective study was conducted on patients who had onlay bone grafts for vertical or horizontal augmentations followed by dental implantation for 2 years. Files of 50 healthy patients who received 129 implants in augmented sites were reviewed. Implant survival, radiologic implant success (marginal bone loss), and complications were recorded.
Results
Follow-up from time of implantation ranged from 6 to 67 months (mean: 24.3 Â± 11.2 months). The overall survival rate was 96.9 % (four implants were removed). Marginal bone loss around implants ranged from 0 to 3.3 mm (average: 0.22 Ã± 0.45 mm). Only 5 % of the implants presented marginal bone loss of 1.5 mm over the follow-up time.
Conclusions
Intraoral bone block graft surgery is a predictable operation for the use of dental implants. Implant placement in augmented areas presents high survival and radiologic success rates with minimal bone loss.

EP-I 22
To evaluate the success of two stage implant placement following maxillary sinus lift procedure with calcium phospho silicate bone graft

Neelakamal Hallur, Aaisha Siddqua, Syed Zakaullah, Ashwin Shah, Chaitanya Kothari, Shereen Fathima, Meenakshi Kothari, Juhi Shabnam, Shaikh Junaid Ahmed

Al badar Rural Dental College and Hospital

Abstract
Introduction
Ridge resorption and sinus pneumatization in atrophic posterior maxilla can compromise implant rehabilitation in a patient. To increase amount of bone in such cases, sinus floor elevation using bone graft material has been advocated. Various graft materials such as autogenous grafts, allografts, xenografts, alloplastic materials etc. have been found to possess osteo-conductive and osteo-inductive properties.
Aim & Objectives
To evaluate the efficacy of calcium phospho silicate bone graft for sinus floor elevation in 2 stage implant placement.
Materials and methods

10 patients with atrophic maxilla requiring implant placement in posterior alveolar ridge, who fulfilled the inclusion criteria were included in the study. Radiographically pre-operative and post-operative bone height was measured with IOPA using adobe Photoshop 7.0 after six months follow up. Bone density was evaluated with OPG using DIGORA software. Implants were placed thereafter and stability was evaluated clinically.

Result

The vertical bone height achieved in all the cases was significantly satisfactory with T-value of 17.29 ($P = 0.05$). The postoperative density of the grafted bone was found to be similar as the normal bone.

Conclusion

Satisfactory bone height and bone density were achieved following use of calcium phospho silicate as a graft material in sinus lift procedure with100 % success rate.

EP-I 23

Evaluation of the influence of soft tissue thickness on crestal bone changes and vertical bone loss in two stage implant placement at mandibular Ist molar site

Neelakamal Hallur, Aaisha Siddiqua, Syed Zakaullah, Ashwin Shah, Chaitanya Kothari, Shereen Fathima, Meenakshi Kothari, Juhi Shabnam, Saudagar Mohd Ziauddin

Al badar Rural Dental College and Hospital

Abstract

Aims and objectives

To evaluate the soft tissue thickness and crestal bone changes and vertical bone loss in two stage implant placement.

Materials and methods

Ten implants were placed at mandibular first molar site. Patients were divided into two groups, group I included patients with thin mucosa (0–2 mm) group II included Patients with thick mucosa (>2 mm). During the first stage mucosa thickness was measured with endodontic reamer no 25, followed by implant placement. After an average of 17 weeks, implants were loaded with single crown prosthesis. IOPA radiograph were exposed after implant placement and at the end of first, third and sixth months. Vertical bone height was measured using grid.

Result

After 6 months of follow up period overall bone loss in group I patients was 0.96 mm and bone loss in group II patients was 0.17 mm. Mean (SD) of bone loss was calculated and values showed significant difference in bone loss between thin and thick mucosa.

Conclusion

Restal bone loss was greater in patients with thin mucosa (0.96, 85 %) than with thicker mucosa (0.17, 15 %).

EP-I 24

Complications of lateral window approach sinus lift procedure and its management

Sneha Nebhnani, Yogesh Kini, Mukul Padhye, Sneha Ramesh Nebhnani

D. Y Patil University School of Dentistry, Navi Mumbai

Abstract

Background

In today's world, implant dentistry has largely taken over other methods of restoring lost teeth. Implant placement in the maxillary posterior region demands its own pre-requisites. The pneumatisation of the maxillary sinus in long standing edentulous posterior maxillary regions makes the bone height insufficient for implant placement.

Objective

To increase the amount of bone in the maxilla, the procedures followed are; the sinus floor elevation procedure, or subantral augmentation.

Methodology

This procedure involves placing bone graft material in the maxillary sinus to increase the height and width of the alveolus. Sinus lift surgery is a proven and reliable technique because of the low observed rate of postoperative complications and the success rate of implants placed into the grafted area.

Result & Conclusion

Like other surgeries, the maxillary sinus lift procedure is not without complications. To minimize risk, care must be taken with all technical details and risk factors that can lead to fatality. There are early and late complications after sinus lift procedures. The most common intraoperative complication is damage to the schneiderian membrane. Other postoperative complications include wound infection, abscess, or dehiscence with drainage, maxillary sinusitis of the operated area, partial exposure of the simultaneous onlay graft, and loss of the graft. Here we discuss the management of complications of sinus lift and augmentation procedure.

EP-I 25

Guided Bone Regeneration By Platelet- Rich Plasma (PRP)

Suganraaj, Vijay Ebenezer

Sree Balaji Dental College and Hospital

Abstract

Guided bone regeneration is an accepted surgical method employed in implant dentistry to increase the quantity and quality of the host bone in areas of localized alveolar defects. The lack of predictability in osseous regenerative procedures with various grafting materials suggests that improvement in the osteoinductive properties of these materials is highly desirable. Platelet-rich plasma (PRP), a modification of fibrin glue made from an autologous source of platelet derived growth factors that is obtained by sequestering and concentrating platelets by gradient density centrifugation. Thus used to deliver growth factors in high concentration to sites requiring osseous grafting. Growth factors released from the platelets include platelet-derived growth factor, transforming growth factor beta, platelet-derived epidermal growth factor, platelet-derived angiogenesis factor, insulin-like growth factor 1, and platelet factor 4. These factors signal the local mesenchymal and epithelial cells to migrate, divide, and increase collagen and matrix synthesis. PRP has been suggested for use to increase the rate of bone deposition and quality of bone regeneration when augmenting sites prior to or in conjunction with dental implant placement. Growth factors released from activated platelets initiate and modulate wound healing in both soft and hard tissues. This e- poster is a discussion on the recent strategy to promote the wound-healing cascade with autologous platelet concentrate suspended in plasma.

EP-I 26
Implants in esthetic zone: a challenge for the clinician

Divya/Mukul

DY Patil University School of Dentistry

Abstract
Background
Replacement of multiple missing teeth in the esthetic zone is challenging particularly when the three dimensional architecture of the existing bone and soft tissue is deficient. To mimic patients original smile required for perfect placement of implant in 3 dimension.
Objective
The purpose of the poster is to concentrate on the treatment outcome of implant therapy performed in the esthetic zone. To concentrate on immediate extraction and perfect implant placement when performed in anterior region.
Material & Method
A randomized clinical trial on 5 patients in whom the inclusion criteria were age group, shade selection and incisal show, exclusion being medically compromised. This poster will discuss step-by-step procedure for extraction and immediate implant placement with esthetic zone and measures to achieve maximum result.
Result
In one case soft tissue insufficiency was noted. In another case implant was placed out of arch and prosthetic correction was needed. Other cases showed satisfactory results.
Conclusion
Placement of a dental implant in the esthetic zone is a technique sensitive procedure with little room for error. This poster will discuss parameter to consider while place and loading these anterior implants.

EP-I 27
Direct sinus lift procedure

M Mounika, A. P. Mohan, K.A. Jeevan Kumar, B. Pavan Kumar

Kamineni Institute of Dental Sciences

Abstract
Background
The posterior maxilla presents several challenges to the implantologist. Implant dentistry has become an excellent treatment modality since its inception into the modern era of dentistry. In patients with deficient alveolar ridges, it could jeopardize the application of implant dentistry. The problem is especially magnified in posterior maxilla where ridge resorption & sinus pneumatization are often encountered. The procedure of choice to restore this anatomic deficiency is maxillary sinus floor lift up.
Objective
Placement of implant supported prosthesis in posterior maxilla in patients with deficient alveolar ridges.
Methodology
The edentulous area is prepared for placement of dental implants with a lateral window sinus lift. Incisions into the soft tissues are made. The soft tissue is flapped back to expose underlying lateral wall of maxillary sinus. The bone is now removed with a piezoelectric instrument, exposing the underlying schneiderian membrane. Through careful instrumentation the membrane is then peeled from the inner aspect of sinus cavity. The bony floor of sinus cavity without its lining membrane can now be visualized. The newly formed space within the cavity of sinus yet inferior to intact membrane is grafted.
Results
The floor of the sinus will now be more superior than before, providing enough room to place dental implant into edentulous site.
Conclusion
Many advanced surgical techniques exist to overcome the expected anatomical difficulties during implantation. Even in compromised situation, by good evaluation of patient's desires, available possibilities and choosing appropriate technique, the likelihood of success increases greatly.

EP-I 28
Modified palatal roll flap—how do i manage the labial defect?

Ujjval Mehrotra

KLE VK Institute of Dental Sciences

Abstract
Background
Dental implants have been used successfully to replace missing teeth. The key determinant for obtaining a successful dental implant in the aesthetic zone is the ability to create a stable gingival architecture at gingival margin and interproximal papilla. Soft tissue augmentation techniques may satisfactorily and predictably re-create esthetic enhancement in mild to moderate horizontal defects. In 1992, Scharf and Tarnow described a modification of Abram's original technique. They used a trap door approach by reflecting and preserving a partial thickness flap overlying the area where the connective tissue pedicle would be subsequently harvested.
Objective
To evaluate the effectiveness of modified roll flap technique for soft tissue augmentation in case of second stage implant surgery.
Methodology
Patients complaining of a missing tooth in the esthetic zone and are ready for implant treatment, and give consent to participate in the study were selected. The palatal roll flap procedure is performed in the second stage of implant treatment.
Results
The palatal roll flap technique has proved to be an advantageous procedure for labial soft tissue defects in the esthetic zone. It gives good long term results for soft tissue augmentation.

EP-I 29
Maxillary sinus lift techniques

Swapnil Garde

Sinhagad Dental College and Hospital

Abstract
Dental implants have gained popularity over fixed partial denture. Pneumatisation of the maxillary sinus accounts for insufficient residual ridge height for implant placement in the maxilla. To treat these patients, sinus lift procedures with augmentation bone are developed. Currently there are various techniques available for sinus floor elevation. Also a variety of graft materials are available to the surgeon for achieving sinus lift. This presentation intends to give an overview of the various techniques currently used for sinus lift procedures.

EP-I 30
Use of PRF in dental implants

Venkat

Sree Balaji Dental

Abstract

Background

Immediate implant is an procedure in which implant is placed immediately after tooth extraction leading to less crestal resorption during healing and lead to ideal orientation of the implant. PRF is obtained without adding anticougulants like heparin, EDTA, bovine thrombin etc.cytokines are released and stimulate the immune process of chemotaxis and accelerates cicatrization.

Objective

Aimed at obtaining bone formation after introduction of PRF in the implant bone defect.

Methodology

Under LA full thickness flaps were elevated and tooth were carefully mobilised and extracted and a cylindrical implant was placed. PRF was placed in the gap between the implant and the extracted socket and a closure screw was placed and flaps are sutured.sutures were removed after 7 days. Once healing is satisfactory abutments were placed. Prosthesis is cemented and clinical parameters are noted. Post operative radiographs are taken after 4th and 12th week and tabulated.

Results

Rate of bone regeneration is more and has elevated healing potential with the use of PRF in implants.

EP-I 31
Sinus lift using hydrodynamic pressure

R. S. Bedi, Shamita Tiwari

Saraswati Dental College, Llucknow

Abstract

A sinus lift is a surgery that adds bone to your upper jaw in the area of your molars and premolars. It's sometimes called a sinus augmentation. The bone is added between your jaw and the maxillary sinuses which are on either side of your nose. The use of bone grafting of the maxillary sinus to increase osseous tissue dates back to 1960 s when Boyne used this technique for prosthodontic purposes. Boyne used the lateral approach to lift the sinus. However, it was an invasive procedure. In 1994 Summers introduced a less invasive crestal sinus lift technique. This was a blind technique. The quest to find lesser invasive techniques, techniques with faster post operative healing and techniques which could improve implant stability, led to the advent of Hydrodynamic sinus lift. This is a crestal technique first introduced by Troedhan, Kurreck and Wain Wright in 2008. As caregivers we are always looking for techniques that would minimize discomfort to the patient, reduce post operative infection as well as help us as surgeons to achieve our desired results. Hydrodynamic sinus lift is one technique which solves our purpose with a high success rate.

EP-I 32
Immediate placement of implant in atrophic mandibular ridge using ridge split technique and autogenous bone graft mix with PRF—A case report

KV Ramana Reddy, Prabuddh Sen, Sunil Singh

Army, Secunderabad

Abstract

Several techniques are available to enhance bone volume for implant placement. These procedures include bone grafting, guided bone regeneration, and distraction osteogenesis. Expansion of the existing residual ridge is another method to prepare the atrophic maxilla and mandible for implant insertion and augmentation. This approach has been referred to as ridge splitting, bone spreading, ridge expansion, or the osteotome technique. This poster presents a case report associated with immediate placement of implant in atrophic mandibular ridge using ridge split technique and autogenous bone graft mix with PRF.

EP-I 33
The weld one technique

S. P. S. Sodhi, Ritu Bala

Dasmesh Institute of Research and Dental Sciences

Abstract

Implant therapy is a highly predictable and successful treatment option to restore edentulous sites. For this, time lapse between implant placement and prosthetic phase is six months to one year which is not accepted by patients. So a new technique has been invented in which multiple implants in a single arch are joined by a bar by intraoral welding. This permanent joint between bar and an implant enables an immediate and stable framework which provides optimum support for temporary and permanent restoration. This technique is a fast, chair side and economical procedure and above all is comfortable to patients.

EP-I 34
Immediate implant placement and provisionalization in esthetic zone

Preetkanwal Singh Ahluwalia, Akanksha Zutshi

National Dental College and Hospital, Derabassi

Abstract

Bone resorption and remodeling are inevitable sequelae of dental extraction beginning immediately after the extraction procedure and thereby reducing bone volume. Attempts to ameliorate postextraction

alveolar bone changes include socket augmentation using various graft materials, immediate implant placement into fresh extraction sockets and immediate temporization. In contrast with traditional protocol, immediate implant placement after tooth extraction maintains horizontal and vertical dimensions of osseous tissues. Implants are immediately placed into fresh extraction sockets without raising a flap and loaded immediately. Implants are restored immediately with provisional crowns. Final restorations can be placed after 3 to 6 months. Immediate temporization after implant placement, a recent concept, limits the functional occlusal forces that are directed towards the bone, provides implant stability, maintains soft tissue contour and eliminates the need for a second surgery.

EP-I 35
Assessment of implant stability at 6 months using osteotomies sinus osteotome sinus floor elevation technique without grafting material – A pilot study

Nahas Mohamedali

Abstract
The edentulous posterior maxilla is frequently characterised by post extraction ridge atrophy, pneumatisation of the sinuses, low bone density and the high occlusal loads of the dental arch. Summer introduced alternative surgical approach which used a series of osteotomes. In this technique, the maxillary sinus was accessed through the alveolar crest and peri-implant bone simultaneously. Sinus grafting is generally required to provide sufficient vertical bone volume for implant support. Peri-implant bone formation after sinus augmentation without grafting material has now been well documented. A pilot study is carried out on 10 patients who were placed with implants in the maxillary posterior region by osteotome sinus floor elevation technique without any graft material and assessment of implant stability was done after 6 months of the procedure.

EP-I 36
All on four implant treatment protocol for edentulous jaws

Gurkirpal, Sumeet Sandhu, Amit Dhawan, Jasmine Kaur

Abstract
Loss of mandibular teeth is very common. Various treatment modalities have been used to rehabilitate edentulous mandible. Among them are complete dentures and implant supported full jaw prosthesis. Atrophy of posterior ridge poses a serious challenge both for complete dentures and conventional axial implants. Present study deals with this problem by tilting the implants in buccolingual direction in the posterior region with horizontal atrophy. This method of using tilted implants for restoring edentulous jaws is also known as all on four method. In the present study 67 implants were placed out of which 39 were tilted and 28 were placed axially. Patients were followed up for marginal bone loss and overall success for 12 months. Implants were placed using 2 stage protocol There was no significant difference between the marginal bone loss between the two groups. At the end of 12 months post loading tilted implants provided good results for restoration of posterior mandibles with horizontal atrophy.

Maxillofacial Pathology (CODE EP-MP)

EP-MP 1
A rare case of keratocystic odontogenic tumour: A Case report

Gaurav Singh

Sardar Patel Post Graduate Institute of Dental & Medical Sciences

Abstract
Introduction
The World Health Organization (WHO) has reclassified 'odontogenic keratocyst' (OKC) to keratocystic odontogenic tumour (KCOT) in 2005. Currently, this tumour is classified as a benign neoplasm of odontogenic origin and not as a cyst. It is defined as a benign uni- or multicystic, intraosseous tumour of odontogenic origin, with a characteristic lining of parakeratinized stratified squamous epithelium and has potential for aggressive, infiltrative behaviour.
Aim
The purpose of this paper is to review the features and behaviour of the keratocystic odontogenic tumour (KCOT) to analyze a series of histologically confirmed KCOT case; and to review and discuss the redesignation of KCOT and the implications for treatment.
Methods
A case of a 37 year old male patient of KCOT that came to the OPD of department of Oral & Maxillofacial surgery, of Sardar Patel PG Institute of Dental & Medical Sciences with a chief complaint of pain & facial asymmetry on left side from past one year.
Conclusion
The aggressive nature of KCOT warrants an aggressive treatment strategy. The most effective treatments are marsupialisation with later enucleation, enucleation supplemented with chemical cauterization or, resection if needed. Future treatment may involve molecular-based modalities, which may reduce or eliminate the need for aggressive surgical management.

EP-MP 2
Juvenile ossifying fibroma of maxillary posterior region

Uma Mahindra, Anushree Shewale

Pravara Institute of Medical Sciences, Loni

Abstract
Juvenile ossifying fibroma is a rare fibro-osseous tumor of gnathic and extra gnathic craniofacial bones particularly the periorbital, frontal and ethmoid bones. Fibro-osseous lesion of head and neck were first reported in 1938 by Benjamins. The most characteristic feature of JOE as its name suggest, is its higher incidence in children and young adults, however it can occur in older age groups. It is an uncommon condition, representing around 2 % of mouth tumors that generally occur between ages 5 and 15 years. JOF is a well defined clinical and histological entity that has recently been seperated from other fibro-osseous lesion, including cemento-ossifying fibroma. It usually manifests as an asymptomatic bony hard swelling whose size and extent depend on site of occurrence and aggressiveness of the lesion. This poster will be presenting the case examined a 11 year female

patient diagnosed as juvenile ossifying fibroma of maxillary posterior region, a conservative treatment was chosen, and the reintegration of the child in his social environment.

EP-MP 3
Oroantral communication closure using a pedicled buccal fat pad: a case report

Anupama Kumari

Buddha Institute of Dental Science & Hospital Patna

Abstract
Oral fistula (OAF) is a pathological communication between the oral cavity and maxillary sinus which has its origin either from iatrogenic complication or from dental infections, osteomyelitis, radiation therapy or trauma. OAF closures can be achieved using different flap which show both advantages and limitations. Therefore they all need careful consideration in order to select the best approach depending on the situation. The most widely employed flaps are of three types: vestibular flap, palatal flap, and buccal fat pad flap (BFP). This case report is of a 37 years old female patient who was referred for closure of oroantral fistula. Upon clinical examination, the fistula connecting the oral cavity to the maxillary sinus was identified. An outpatient surgical procedure was performed under local anesthesia to close the oroantral fistula using a combination of the buccal advancement flap along with a pedicled buccal pad of fat. The healing of the wound and complete closure of the OAF was evident after a thirty days post-operative period with no sign of the defect.

EP-MP 4
Current concept in management of odontogenic keratocyst

Ananya Das

Guru Nanak Institute of Dental Sciences and Research

Abstract
Odontogenic keratocyst is a benign unicystic or multicystic intraosseous tumor of odontogenic origin (originated from dental lamina) with a characteristic lining of parakeratinised stratified squamous epithelium which has a potential for aggressive infiltrative behaviour with high recurrence rate. Previously it was known as Primordial cyst, later WHO described it as Keratocystic odontogenic tumor as it better reflects the neoplastic nature. It has a commonest site for occurrence in mandibular ramus and body & accounts 3–11 percent of all jaw cysts. A wide spectrum of surgical treatments have been used for the odontogenic keratocyst. Recommendations have ranged from marsupialization and enucleation to en bloc resection/peripheral osteoctomy as well as chemical cauterisation. Combination of enucleation and liquid nitrogen cryotherapy, may also offer patients improved therapy in the management of odontogenic keratocysts. This poster addresses the current concepts for the management of odontogenic keratocyst and their clinical outcome.

EP-MP 5
Benign fibrous histiocytoma of maxilla—a rare case report

Kiruthika Vijayaraghavan

Sri Ramakrishna Dental College & Hospital, Coimbatore, Tamil Nadu

Abstract
Background
Benign fibrous histiocytoma (BFH) is a mesenchymal tumor which commonly affects the skin of extremities. Histologically, BFH of soft tissues and bone shows similar features, but BFH of the bone is rare with less than 10 cases reported worldwide and usually it involves tibia, femur, and pelvic bone.
Objective
As far as the oral cavity is concerned, majority of the BFHs are found in the soft tissues of the buccal mucosa, gingiva, lower and upper lips, soft palate, and floor of the mouth. Occurrence of this tumor in the jaw bones is extremely rare as only one case of the maxilla and six cases of the mandible have been reported so far.
Methodology
We present the second case of BFH of the maxilla in a 15-year-old female patient. Our case report describes the clinicopathologic characteristics, differential diagnosis and surgical management of a BFH in the maxilla.
Result
8 months follow up of the case with our mode of treatment has shown better outcomes.
Conclusion
Rare cases are becoming more common in this materialistic world and different treatment methods and options give us a better clinical outcome and patient satisfaction.

EP-MP 6
Deep space infections leading to necrotic fasciitis

Mehaboob Shaik, Stevenson Hasanalli

St Josephs Dental College, Eluru

Abstract
An intimate knowledge of the management of infections of the deep spaces of the neck is essential to the daily practice of oral and maxillofacial surgeon. Necrotizing fasciitis is an uncommon soft-tissue infection, usually caused by toxin producing, virulent bacteria, which is characterized by widespread fascial necrosis with relative sparing of skin and underlying muscle. It is a dramatic but rare disease, in the head and neck it often strikes unexpectedly. Early diagnosis and radical treatment are important to maximize the chances of a good outcome particularly when the patient's health is already compromised. Delayed diagnosis is a common event because the condition can arise unexpectedly out of infections or injury. Success depends on prompt diagnosis and treatment without delay for microbiologic confirmation. Interventions must be performed with the appropriate surgical and airway skill. The surgeon must decide either

medical or surgical management. This poster highlights the treatment modalities of necrotic fasciitis.

EP-MP 7
Keratocystic odontogenic tumour-lip split approach

Mahaboob Shaik, A. V. Thomas Raja

St. Joseph Dental College, Eluru, AP

Abstract
The odontogenic keratocyst (OKC) is a cystic lesion of odontogenic origin, which is classified as a developmental cyst derived from the dental lamina. It is one of the most aggressive odontogenic cysts of the oral cavity. OKC is known for its rapid growth and its tendency to invade the adjacent soft tissues and bone. It has a high recurrence rate and is associated with the naevoid basal cell carcinoma syndrome. OKCs may occur in any part of the upper and lower jaw, majority occuring in the mandible, most commonly in the angle of the mandible and ramus. This poster highlights treating odontogenic keratocyst by surgical enucleation followed by chemical cauterization through lipsplit approach.

EP-MP 8
Mandibular brown tumor as the first manifestation of s3condary hyperparathyroidism

Tajamul Ahmad Hakim

Govt Dental College and Hospital Srinagar

Abstract
Background
Patients with hyperparathyroudism are usaully aysmptomatic and clinical presentation of tumor in the jaws is rarely the first manifestation of the desease. Only 2 % of all the hyperparathyroidism cases occur below the age of 30. Here we present a case of 30 year old female patient with previously undiagnosed hyperparathyroidism who presented to us with a right side posterior mandibular swelling since 9 months.
Methods
The patient was evaluated for a mandibular swelling measuring 6 cm–5 cm with soft tissue growth intraorally. OPG showed an osteolytic radiolucent lesion.
Results
Histopathalogy showed a giant lesion and lab tests revealed increased PTH levels and decreased serum Ca levels secondary to renal disorder. A diagnosis of secondary hyperparathyroidism was made. Tumor was excised and patient was treated for hyperparathyroidism.
Conclusion
Radiolucent lesions of the jaws showing giant cells on histopathology should raise suspicion of hyperparathyroidism. This case highlightens the importance of a thorough diagnostic work up for all lesions in the mandible.

EP-MP 9
Odontogenic Myxoma: A Case Presentation

Priyanka Choudree, Kiran Gadre

Bharati Vidyapeeth Deemed University Dental College & Hospital, Pune

Abstract
A case is presented of a patient who reported to us with a chief complaint of a swelling in the lower mandibular anterior region (43-33) since a month. Upon radiographic examination a large radiolucency was seen in the mandibular anterior region and the histopathology report revealed Odontogenic Myxoma. Odontogenic Myxoma is a non-encapsulated benign tumour of the jaws that occurs very rarely. It displays aggressive infiltration of adjacent tissues and a tendency to recur after surgery. It is slow growing, consisting of an accumulation of mucoid ground substance with little collagen. Its origin is believed to be the mesenchyme of a developing tooth or periodontal ligament. Its exclusive occurrence is in close proximity to tooth bearing parts of the jaws. It's the second most frequent benign tumour after ameloblastoma. We planned for anterior mandibular resection and reconstruction with a vascularised free fibular graft due its nature.

EP-MP 10
Hemimandibular hyperlasia

Sahil Sunil Trimbake

Sinhgad Dental College and Hospital, Pune

Abstract
Hemimandibular hyperplasia is an uncommon maxillofacial deformity. Patients with this affliction present clinically with varying degrees of asymmetry characterized by an increase in ramus height, a rotated facial appearance with kinking at the mandibular symphysis, and prominence of the lower border of the mandible. In the advanced form, maxillary and mandibular alveolar bone overgrowth result in a compensatory canting of the occlusal plane and a significant functional malocclusion. A 23 year old female patient of hemimandibular hyperplasia reported to the department of oral and maxillofacial surgery with a chief complaint of facial disfigurement since a period of 6 years. The patient was treated for the same using left condylectomy and inferior border shaving. Follow up has been done for one year and the results are encouraging. The patient is currently undergoing orthodontic treatment for dental correction.

EP-MP 11
Eosinophilic granuloma—a case report

Eapen Thomas, Meenu Antony

Pushpagiri College of Dental Sciences, Thiruvalla

Abstract
Eosinophilic granuloma now referred to as Langerhans histiocytosis is a benign histiocytic disorder presenting in children between ages from 5 to 15 years. It is the most benign disorders of the triad commonly known as histiocytosis X. The origin of the disease was believed to be inflammatory rather than neoplastic. The occurrence of oral lesions are well documented and may be seen solitary or multi focal lesions in maxilla or mandible. Oral involvement is present in approximately 10 % in both children and adults and mandible is affected in nearly 75 % either alone or in polyostotic disease. The most common oral findings are soreness, swelling, ulceration, necrosis of gingival tissues, destruction of alveolar bone with teeth mobility and teeth loss. In young children, the condition can be extremely permeative and destructive in nature. Overall, the behaviour of the disease is unpredictable but, the younger the patient and greater the number of organ systems affected, the worse the prognosis. Henceforth, early diagnosis from oral findings and prompt treatment will help to resolve the clinical manifestation of disease with very good prognosis. In this poster, a case of a 6 year old male child with eosinophilic granuloma of mandible is presented.

EP-MP12
Pleomorphic Adenoma of soft Palate

Shahzaib Nasti

Vydehi Institute of Dental Sciences and Research

Abstract
Salivary Gland tumors represent approximately 3–17 % of all head and neck tumors. Pleomorphic adenoma is the most common benign tumor occurring in major and minor salivary glands. The mean age ranges from 25 to 58 yrs with prevalence in the 4th decade of life. Pleomorphic adenoma of the palate is less common. Histologically pleomorphic adenoma shows a large diversity with intercalated cells, myxoid and chondroid material. Pleomorphic adenoma, shows large rate of recurrence leaving a treatment option of surgical exision. This is a case report in our institution on pleomorphic adenoma of soft palate which was treated with surgical excision and primary closure.

EP-MP 13
Gorlin goltz syndrome: a rare case report

Girish B. Giraddi, Aamir Malick Saifi

Government Dental College & Research Institute, Bangalore

Abstract
The Gorlin-Goltz syndrome, also known as nevoid basal cell carcinoma syndrome is a rare autosomal dominant syndrome caused due to mutations in the Patched tumor suppressor gene found on chromosome arm 9q. This syndrome shows a high penetrance and variable expressivity. It is characterized by basal cell carcinomas, odontogenic keratocysts, palmar and/or plantar pits and ectopic calcifications of the falx cerebri. Together with these major features, a great number of processes considered as minor features have also been described. Due to the importance of oral & maxillofacial manifestations of this syndrome, it is fundamental to know its characteristics in order to make a diagnosis, to provide an early preventive treatment and to establish right genetic advice. A rare case report of a patient with characteristic features of Gorlin-Goltz syndrome diagnosed at government dental college and research instituute, bangalore is presented here.

EP-MP14
A rare neural tumor in the infratemporal fossa

Abhinav. R. P., M. R. Muthusekar

Saveetha Dental College and Hospital

Abstract
Schwannoma's are benign nerve tumors of schwann cell origin. Schwann cells are derived from neural crest and are therefore of neuroectodermal origin. It forms the myelin sheath of the peripheral nerves. 25–40 % of all schwannomas arise in the head and neck region.A few cases of schwannoma have been reported arising in the infratemporal fossa region. This region is an anatomically complex region with multiple nerves and vessels which enter and exit the skull. Different surgical approaches to the infratemporal region are used to gain access. Here we present a case report of a patient who reported to our OPDwith a chief complaint of swelling in the right cheek region for the past two months.A transzygomatic approach to the Infratemporal fossa was done to excise the tumor.

EP-MP 15
Fibro-osseous lesions of jaw

Ajoy Sahi, Ashish Kumar

Buddha Institue of Dental Sciences & Hospital

Abstract
Fibro-Osseous lesions [FOL] are a group of lesions which are known to affect the jaws and the craniofacial bones. The diagnosis of FOL is regarded as very confusing area in diagnostic pathology. The term fibro-ossification refers to a diverse process in which the normal architecture of bone is replaced by fibrous tissue containing varying amount of foci of mineralization. These groups of lesions are known to encompass common characteristics that include common clinical and radiographic features. Most of these lesions are of unknown aetiology, while some lesions are believed to be neoplastic while others are related to metabolic disturbances and are also believed to cause considerable diagnostic challenges. While some of the FOL are believed to be true neoplasms having a considerable potential for growth if not fully excised. We hereby report three case of FOL of different types-fibrous dysplasia, ossifying fibroma and cementoossifying fibroma.

EP-MP16
Central odontogenic fibroma mimicking dentigerous cyst: a case report

Supreet Kaur, Sunaina Singla

Gian Sagar Dental College & Hospital, Rajpura

Abstract
Odontogenic fibroma is a relatively rare and benign odontogenic tumor of mesodermal dental sac or periodontal ligament origin. Radiographic images of COF may mimic dentigerous cysts at times as there are no particular radiographic features distinguishing COF from Dentigerous Cyst. So, final diagnosis is usually based on histological findings. A case of 9 yrs old boy who reported to department of oral & maxillofacial surgery with chief complaint of painless intraoral swelling in right lower posterior jaw region is presented. Radiographic findings suggested well defined radiolucency in right mandibular angle region associated with the tooth bud of mandibular second molar.

EP-MP 17
Recent advancements in the management of cystic lesions

Shreyas Gupte, Aditi Mohandas

Yerala Dental College and Hospital

Abstract
A cyst is defined as a pathologic cavity having fluid, semifluid or gaseous contents and which is not created by the accumulation of pus. Most cysts but not all, are lined by epithelium. However, all cysts eventually grow in size resulting in net loss of bone creating a defect. Standard accepted line of treatment for cysts has been marsupialisation or enucleation, with predominance being enucleation of cysts. Thus once the lining has been enucleated, what lies beneath is a bony defect, which if left untreated, may affect the quality, quantity and also the time period for bone regeneration. Cortico-cancellous bone grafts have been the gold standard. The newer alternatives namely allografts, PRP, PRF and most recently autologous stem cells have been documented in accelerating the healing of these defects when compared to leaving the cavity as is. Hence my poster—Fill It, Forget It V/S Leave It, Forget It.

EP-MP 18
Management of large arterio-venous malformation of upper lip: a case report

Daya Shankar Rao Jk, Alok Bhatnagar, Aadhya Sharma, Varun Arya, Vijay Siwach, Sundeep Sharma

SGT Dental College and Research Centre, Budhera, Gurgaon

Abstract
Vascular Lesions of Head and Neck are classified as Hemangiomas or Vascular Malformations. They lead to cosmetic problems and life threatening hemorrhages. Hemangiomas are noticeable in infants, are self-limiting and usually do not lead to hemorrhages. AV Malformations are high flow vascular anomalies that occur due to direct communication between an artery and vein by bye passing the capillary bed. They are persistent and progressive in nature with a gradual onset representing a lethal disease. They can be diagnosed by radiography, CT Scans, MRI and Angiography. They require extensive reconstruction procedures and their management requires an integrated team of oral surgeons, radiologists and critical care specialist. Current Treatment for such malformations are surgical resection and endovascular embolization. The surgical approach is associated with high mortality and morbidity rates due to excessive hemorrhage. These types of lesions can be managed esthetically with very few complications with a conservative non invasive approach by an efficient skilled surgeon keeping in view regional vascular anatomy in consideration. Here we present a case of a large AVM of the upper lip in a 34 years old female patient successfully treated in SGT Dental College, Budhera, Gurgaon using circumferential ligation of facial artery along with bulk reduction and potential Resection. This technique came out as a success for the above given problems.

EP-MP 19
A Prospective study of the microbiology and antibiotic sensitivity and resistance in head and neck fascial space infections

V. V. Giri, C. Ravindran, Eswari J Agdish

Sri Ramachandra University

Abstract
Head and neck space infections are the most common and also most difficult to treat due to various antibiotic resistant bacteria. In India, 70 % of the maxillofacial space infections have pulpal origin and submandibular space being the most common. Usually, the most common form of microflora in head and neck space infections are staphylococcus, klebsiella, e.coli, and peptostreptococcus in the anaerobic group. The purpose of this study is to evaluate the most common bacteria and susceptible antibiotic to infection in the head and neck spaces. A total of 25 patients are being evaluated over a period of 5 months. All patients will undergo an initial culture and sensitivity test following which they will be treated with an empirical antibiotic. A surgical incision and drainage will be done. Based on the culture and sensitivity reports and antibiotic susceptibilty, they will be treated with the respective IV antibiotics. Patient demographics which include gender, age, involved fascial spaces, micro-organisms will be evaluated. Therefore, this poster will throw light on the more prevelant microbiology in head and neck space infections and the role of antibiotic sensitivity and resistance to the same.

EP-MP20
Osteoma of the mandibular condyle; a case report

Sivakumar Kota

Meenakshi Ammal Dental College & Hospital

Abstract
Osteomas are benign, osteogenic lesions that may arise from proliferation of cancellous (trabeculae), compact bone (dense lamellae) or can be composed by a combination of both. Herein we are reporting a case of a 35 year old male who presented with large (aprox 4×4×4.5

cm) hard tissue tumor involving the condyle, histologically found to be an osteoma. Besides its rarity, of primary interest here is the surgical aspect wherein we approached posteriorly and excised the tumor through a modified Al-Kayat Bramely incision as opposed to the traditional lip split cheek flap approach. The lip split approach though valued for its excellent accessibility carries many disadvantages. In addition the poor aesthetic result due to the scar, the probability of lower lip weakness due to injury to marginal mandibular nerve is high and the resection of the mental nerve leading to parasthesia is an inevitable morbidity of the procedure. In contrast, we are proposing that an Al-Kayat Bramley approach extended inferiorly till the angle would provide adequate accessibility while avoiding the inevitable co-morbidities. The only consideration here would be the possible injury to the facial nerve which can be avoided in an experienced hand by maintaining the correct plane.

EP-MP21
Maxillary ameloblastoma: diagnostic challenge for the surgeons

Jasleen Kaur Handa, Ashwin DP

Vokkaligara Sangha Dental College and Hospital

Abstract
Ameloblastomas are benign asymptomatic intraosseous lesions that affect the bones of the maxillomandibular complex, interfering both in function and facial esthetic appearance. Ameloblastoma is uncommon in maxilla comprising about 15 % of all cases and is commonly associated with painless swelling, loosening of teeth, nasal airway obstruction, malocclusion, periodontal diseases and ulceration. The close proximity of maxilla to the orbit, skull base and intracranial contents contributes to the high morbidity and mortality rate associated with it. Management of maxillary ameloblastoma often is an enigma to the maxillofacial surgeons who carefully have to choose between two available treatment strategies: conservative and radical. Recurrence rate is reportedly as high as 15 % to 25 % after radical treatment and 50 % to 90 % after conservative treatment. Nevertheless, recurrence rate of 10–25 % has been reported in unicystic ameloblastoma cases treated with enucleation followed by use of Carnoy's solution. A case report of 22 year old male diagnosed with unicystic Type III ameloblastoma at premaxilla is presented. After taking into consideration the complexity of the involved area, diagnosis and challenges associated with reconstruction and rehabilitation; surgical enucleation of the lesion with chemical cauterization using Carnoy's solution was planned and carried out.

EP-MP 22
Osteomyelitis in a ricket patient

Shahid Farooq

Govt Dental College and Hospital Srinagar

Abstract

Background
Rickets is a defective mineralisation or calcification of bones before epiphyseal closure due to defeciency or impared metabolism of vitamin D potentially leading to fracture and deformity. Although there is no direct relation between rickets and osteomyelitis but patients with rickets are usually susceptible to infections due to defective and weak bone. Here we present a case of 50 year old male patient with osteomyelitis who was diagnosed with vitamin defeciency rickets coincidently.

Methods
A 50 year old male patient reported to our department with chief complaint of pus discharge from extraction socket. After preliminary examination and investigations patient was seen having all features of vitamin defeciency rickets (ricketic rosary, bowed legs, craniotabes, short hands, decreased vitamin D levels) that was not treated till date.

Results
Histopathology revealed an osteomyelytic lesion of mandible that was resected and the patient was treated for nutritional defeciency rickets.

Conclusion
Although there is no direct relationship between rickets and osteomyelitis but the present case points towards the fact that patient with rickets can be more prone to bone infections due to defective mineralisation. The present case also highlightens the importance of a through diagnostic work up in such patients.

EP-MP 23
Pseudo aneurysm of the internal maxillary artery after lefort-1 osteotomy—a rare complication

K S Ravindran Nair, N M Sanoj

Government Dental College, Trivandrum

Abstract

Introduction
Lefort 1 osteotomy in the current age is an important procedure in the surgical armamentarium of the maxillofacial surgeons.As is with any procedure even this procedure has as risk and complications. Which may be immediate or delayed. The word aneurysm is derived from the Greek word which means dilation, either it is localized or generalized sometimes it is true or pseudo. True means all layer of vessel involved.

Clinical Features
21 years old male patient with presence of recurrent episodes of epistaxis following lefort-1 procedure. General and local examinations apparently normal. Hb level reduced than preoperative value.CT, MRI, CT Angiogram reveals aneurysm of branch of internal maxillary artery.

Management
Management starts after correcting Hb level.Control of bleeding using pressure packing following by maintaince of hemodynamic balance using intravenous fluids. Treatment of choice is embolization of the feeder vessel.Commonly using emboli agents are PVA foam, Micro coils and liquid adhesives. Lesion is removed through lip switch incision and mandibulotomy approach. Postoperative period is uneventful.

EP-MP 24
Unicystic ameloblastoma: a case report

Shrutika Salunkhe

Bharati vidyapeeth deemed university, Dental College and Hospital, Sangli

Abstract
Background
A Unicystic Ameloblastoma is rare, benign, locally invasive odontogenic neoplasm of young age that shows clinical, radiographic or gross feature of an odontogenic cyst, but histologically shows typical ameloblastomatous epithelium lining part of the cyst cavity with or without luminal and/or mural tumor growth.
Objective
A typical case of large Unicystic ameloblastoma of mandibular region which was treated by surgical enucleation and carnoy's solution application for 3–5 min. Followed by BIP (Bismuth Subnitrate Idoform Paraffin Paste) dressings.
Method
Surgical enucleation along with extraction of involved teeth and chemical cauterization-Carnoy's solution application for 3 min and followed by postoperative dressing of BIP (Bismuth Subnitrate, Iodoform and Paraffin Paste).
Result
There was complete regeneration of bone after 2 years follow up and also no signs of recurrence was present.
Conclusion
We should be aware of the unilocular radiolucencies of the jaws as these lesions could be Unicystic Ameloblastoma. Timely intervention and conservative surgical treatment followed by application of Carnoy's solution and the extraction of closely related teeth may improve treatment outcome and potential complications associated with larger resection.

EP-MP 25
A Giant odontogenic myxoma of maxilla extending to skull base: a surgical challenge!!

Srijon Mukherji, G. K. Thapliyal, Niladri Sekhar Bakshi

Rama Dental College Hospital & Research Center

Abstract
Odontogenic myxomas are benign tumors derived from the remnant primitive mesenchymal structures of a developing tooth including the dental follicle, dental papilla or periodontal ligament. World Health Organization (WHO) defines Odontogenic Myxoma as a benign, locally invasive neoplasm characterized by rounded and angular cells lying in an abundant mucoid stroma that replaces the cancellous bone and expands the cortex. It is an uncommon lesion and is unusual for a bone other than maxilla or mandible to be the site of origin of a true odontogenic myxoma. There are only a few reports on the relative frequency and incidence of odontogenic myxoma in the available literature. However, in Asia, Europe and America relative frequencies between 0.5 and 17.7 % have been reported. We report a case of giant odontogenic myxoma involving maxilla (right) extending upto skull base in a 17 years old male patient.
Objective
This case report outlines the treatment protocol for Odontogenic Myxoma and the way to approach the skull base.
Methodology
Weber Ferguson incision with subcilliary extension, and zygomatic swing for total maxillectomy was performed. Orbital floor reconstruction using iliac crest and obturator for maxillary defect.
Results
The patient has been followed up for 2 years and has remained disease free.
Conclusion
This case report shows ideal surgical approach for maxillary tumour extending to skull base and infratemporal fossa is the Weber Ferguson incision with subcilliary extension and Zygomatic swing.

EP-MP 26
Decompression- treatment of large cyst

Siddharth Rawat

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Abstract
Decompression is the primary treatment of large odontogenic cystic lesions of the jaw. Decompression is a surgical procedure of insertion of a tube or a vent into a cystic cavity, allowing it to be flushed out with water or saline solution everyday. Decompression helps in slowly cleaning out of the contents of the cyst and allows it to shrink to a more manageable size while the jaw regrows healthy bone to take its place. This procedure has been used by various clinicians for treatment of cystic lesion. Therefore thorough knowledge about the technique is important to manage the large cyst of the maxillofacial structures. This poster illustrates the technique, the application, the complication encounter and the success rate the decompression technique as a treatment of large cyst in oral and maxillofacial surgery.

EP-MP 27
Gorlin-Goltz Syndrome—a case report

Rama Bharti, Vinod Kapoor, Govind Jindal

Gian Sagar Dental College and Hospital

Abstract
Gorlin-Goltz syndrome is an uncommon autosomal dominant inherited disorder with complete penetrance and extreme variable expressivity. It is characterized by multiple odontogenic keratocysts and basal cell carcinomas, skeletal, dental, ophthalmic, and neurological abnormalities, intracranial ectopic calcifications of the falx cerebri, and facial dysmorphism. Pathogenesis of the syndrome is attributed to abnormalities in the long arm of chromosome 9 and loss or mutations of human patched gene (PTCH1 gene). Diagnosis is based upon established major and minor clinical and radiological criteria. Due to importance of oral maxillofacial manifestations of this syndrome, it is important to know its characteristics in order to make diagnosis and to provide an early preventive treatment. A case of 20 year old boy who reported to department of oral and maxillofacial surgery, with features of Gorlin-Goltz syndrome in association with multiple odontogenic keratocysts in maxillofacial region has been reported.

EP-MP 28
Lingual thyroid-a case report

Pratik Anand

Buddha Institute of Dental Science and Hospital

Abstract
Lingual thyroid is a rare anomaly caused by aberrant embryogenesis during the descent of thyroid gland to the neck. The first case of lingual thyroid was recorded in 1869. Of all ectopic thyroid 90 % are found to be lingual thyroid. Approximately two third of patient with lingual thyroid lack thyroid tissue in neck and is more prominent in female as compared to male with age reaching to puberty. The presentation in this poster reveals a case of solid firm swelling on posterior third of tongue with chief complaint of dysphagia, breathlessness, and high pitched voice. Proper investigation followed by histopathological examination was done for confirmation and the final diagnosis was lingual thyroid. Up to 70 % of patient with lingual thyroid have hypothyroidism and 10 % suffer from cretinism. So the treatment was finally decided by surgical excision. In patient lacking thyroid tissue in the neck, the lingual thyroid can be excised and auto transplanted to the muscles of neck.

EP-MP 29
Fibrous dysplasia: a case report

Apoorv Shrivastava

Teerthanker Mahaveer Dental College and Research Centre Moradabad

Abstract
Fibrous dysplasia is a developmental tumor like condition in which normal bone is replaced by excessive proliferation of cellular fibrous connective tissue intermixed with irregular bony trabeculae. May involve one or several bones and consists of one or more foci of fibro osseous tissue within the matrix of the affected bone. It is a benign tumour-like congenital process, manifested as a localised defect in osteoblastic differentiation and maturation, with progressive replacement of normal bone with immature woven bone. Fibrous dysplasia is an uncommon bone disorder in which scar-like (fibrous) tissue develops in place of normal bone. A case of monostotic fibrous dysplasia has been reported in a 17 year old girl presented with unilateral swelling in right maxilla which was constant from last 1 year, confirmed the diagnosis of fibrous dysplasia and thus osseous recounting was performed which showed a marked improvement in facial symmetry and no post-operative complications were observed.

EP-MP 30
Infantileb capillary haemangioma treated with surgical excision & sclerotherapy—a case report

Priyanka Singh

Govt. College of Dentistry

Abstract
This Report described a case of infantile capillary haemangioma evident on lip, left upper eyelid& left side of nose in a 10 yr old female that did not regress naturally. The patient came to seek treatment because of functional & esthetic problems. History given by parents revealed that swelling on upper lip had initiated during first week of life & had progressively increased in size during first two years.At 3 yr of age her parents could notice other small swelling over left side of nose & upper eyelid just above the eyelashes.

EP-MP 31
Oral submucous fibrosis; a case report

Institute of Dental Science, Bareilly

Shashwat Saxena

Abstract
Background
Oral sub mucous fibrosis (OSMF) is a chronic, debilitating disease, characterized by inflammation and progressive fibrosis of the sub mucosal tissues. It results in marked rigidity and an eventual inability to open the mouth. The buccal mucosa is the most commonly involved site, but any part of the oral cavity can be involved, including the pharynx.
Objective
To increase the mouth opening of patient after surgical excision & reconstruction using buccal fat pad.
Methodology
Surgical excision of fibrous bands with B/L coronoidectomy and reconstruction with buccal pad of fat. Preoperative mouth opening was measured and postoperative mouth opening was measured after 7 days & 15 days.
Results
Preoperative mouth opening was 8 mm and 15 days post operative mouth opening was 30 mm.
Conclusion
Surgical excision of fibrous bands with B/L coronoidectomy and reconstruction using buccal fat pad shows significant improvement in function with good range of motion and persistent of mouth opening post operatively.

EP-MP 32
Management of KCOT

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Surendera Dental College and Research Institute, Sri Ganganagar, Rajasthan

Abstract
KCOT, a benign, uni or multicystic, intraosseous tumour of odontogenic origin. It comprises approximately 11 % of all cystic lesion of the jaw. It occur most commonly in the mandible, especially in the posterior body and ramus region. Different treatment modalities associated with high recurrence rate ranging from 25 %-60 %. Its treatment modalities varies from conservative to aggressive. Conservative treatment is cystic oriented and include enucleation with or without curettage or marsupializtion. Aggressive treatment include peripheral osteotomy, chemical curettage with carnoys solution and enbloc resection or cryotherapy. The aim of this poster to report cases of KCOT in the jaw and present the importance of reclassification of

OKC as a tumor and focussing over the accurate treatment plan. Here we will be presenting different aspects of KCOT.

EP-MP33
Capillary hemangioma

Arun. P.D

SRI Hasanamba Dental College and Hospital

Abstract
A true vascular tumor that results from a neoplastic overgrowth of normal vascular tissue. It grows by endothelial proliferation Vascular Malformations: Low Flow- Venous, Capillary, Lymphatic High Flow- Arterial, Arterio-venous.
Objective
This poster presents a case report of 48 year old woman having a painless swelling of right maxillary alveolar posterior ridge measuring 2×3 cms in size since 10 days with tendency to bleed mildly on manipulation Methodology treatment of hemangioma Steroid Therapy: Intralesional inj. of Triamcinolone + Betamethasone Cryotherapy: Liquid nitrogen (−160OC or less) Nitrous oxide (−70OC to −90OC) CO2 snow (−60OC to −80OC) L.A.+ Vasoconstrictor decreases vascularity and aids in freezing.
Technique
L.A. + Vasoconstrictor-decreases vascularity-aids in freezing. Compress lesion with probe. Interferon therapy Sclerotherapy: Intralesional inj. of sclerosing agents: Sodium tetradecyl sulphate sodium morrhuate, absolute alcohol.
Effects
Intimal damage Coagulation Contraction Intra-tumoral Ligation: Compression sutures are inserted deeply around the margins of lesion. CO2 Laser, Nd-YAG Laser Maximum penetration, minimum absorption.
Results
The excisional biopsy confirmed as capillary haemangioma followed for 6 months with no recurrence rate.
Conclusion
Since it is a low flow lesion and can be managed by simple surgical excision with precautions to achieve optimal haemostasis if at all bleeding occurs.

EP-MP 34
Fibrous Dysplasia—A Case Presentation

Tanvi

Swami Devi Dyal Hospital and Dental College

Abstract
Fibrous dysplasia is a fibro-osseous lesion in which the normal bone is replaced by immature fibrous bone. There are different forms of FD like monoostotic, polyostotic, craniofacial. It is difficult to differentiate FD from other fibro osseous lesions both clinically and histopathologically. This poster aims at presenting series of case reports on the clinical and histopathologic picture of FD.

EP-MP 35
The road not taken—Why to resect and reconstruct for ameloblatoma, why not conserve and follow up?

Vikram. A

Vokkaligara Sangha Dental College & Hospital, Bangalore 4

Abstract
Ameloblastoma is a benign, slow growing locally invasive neoplasm of varients of ameloblastoma of odentogenic origin with different clinical features and histologic patterns.Clinically there are three variants of ameloblastoma seen namely unicystic, solid (multicystic), peripheral types.Among them unicystic and solid type are the intraosseous tumours with similar clinical behaviours and high recurrence rates. The treatment options of ameloblatoma are always contoversial because of its unique biological behaviour. Though the outcome of radical recsection gives acceptable results, patients experience other complaints like loss of jaw bone support, deformity, dysfunction and psychological stress ever after reconstruction, so the choice of minimally invasive procedure like 'Dredging Method' enables us to preserve the other unaffected structures and gives promising results on a long term follow up. Dredging method is a conservative method which involves deflation, enucleation, curettage and bone regeneration. This presentation emphazises on the benefits and appreciable outcome from this dredging method in the treatment of unicystic ameloblastoma in a case series of 2 patients with a long term follow up.

EP-MP 36
Ameloblastoma of the mandible and its management

Ritu Jain

Teerthanker Mahaveer Dental College and Research Centre Moradabad

Abstract
Ameloblastoma is a benign but locally aggressive epithelial odontogenic neoplasm. It represents 1 % of all tumors of the jaw. It manifests most commonly in the posterior region of the mandible, mostly associated with an interrupted tooth. It occurs over a wide range of ages. It can be treated by enucleation, bone curettage or wide resection. A case of multicystic Ameloblastoma of the mandible of middle age woman who was treated with segmental mandibulectomy with wide segmental resection, which was immediately reconstructed with free bone graft. No post operative complications was observed.

EP-MP 37
Unusual case of keratocystic odontongenic tumor of the maxillary sinus

Gaurav Mittal, Vishnu Sharma

Institute of Dental Studies and Technologies

Abstract
The term odontogenic keratocyst was first used by philipsen in 1956. This lesion was recently renamed by him as keratocystic odontogenic tumor (KCOT) and reclassified as odotogenic neoplasm in the World Health Organizations 2005 edition of its histological classification of odontogenic tumors. KCOT has been defined as " A benign uni or multicystic intraosseous tumor of odontogenic origin, with a characteristic lining of parakeratinized, stratified, squamous epithelium and potentially aggressive, infiltrative behavior and its common site of occurrence is more in the mandible than in the maxilla". In the mandible, the majority of the lesions occur in the ramus and the molar regions. Unusual areas have been reported, such as the anterior portion of the maxilla, the maxillary antrum, and the maxillary third molar area. Its occurrence in the maxillary sinus with an impacted tooth is very unusual. We report a case of KCOT in the left maxillary sinus with an impacted second premolar. The lesion containing impacted maxillary second premolar enucleated in single piece and wall of bony cavity were curetted & primarily closed. Reoccurrence rate is high, accurate clinical, radiological, & surgical observation is required.

EP-MP 38
Giant cell fibroma or giant cell granuloma-a dilemma in clinical & histopathology diagnosis

A S Rana, Deepak Gupta, Mukesh Kumar, Karan Sublok

SBB Dental College, Ghaziabad

Abstract
Background
Giant cell fibroma is a benign tumor which is a localized reactive proliferation of fibrous tissue, much like the irritation fibroma. It is usually small, may have be sessile or pedunculated. It is generally painless & often has nodules on its surface. While Giant cell granuloma is a soft, fleshy, broad-based, and easily bleeding mass. It arises from gingiva, edentulous ridge, & not from lips, tongue or buccal mucosa.
Objective
To correlate the clinical & histopathological diagnosis of giant cell fibroma or giant cell granuloma.
Methodology
A female patient of 68 years presented with a swelling which was asymptomatic and sessile gingival overgrowth extending from distal of 13 to mesial of 16. Overlying mucosa was pale pink in colour. Surrounding mucosa appeared normal. On palpation it was non tender, no bleeding on provocation, non-compressible. It was suspected peripheral giant cell granuloma. Biopsy was not done as the lesion was very small in size. Patient was operated under general anaesthesia and excision was done. Specimen was send for histopathology.
Results
Biopsy report revealed it to be a giant cell fibroma.
Conclusion
The results of the clinical daignosis & histopathology were different.

EP-MP 39
Comparison of cryosurgery & CO2 Laser in treatment of premalignant lesions of buccal mucosa

R. S. Bedi, Manoj Yadav, Aaditya Markandey

Saraswati Dental College, Lucknow

Abstract
Aim & objective of this study was to evaluate efficacy of lasers & cryosurgery and compare the same in the management of patients suffering from different premalignant lesions of the buccal mucosa.
Material & Methods
This study was conducted on 15 patients who reported with bilateral premalignant lesions in the outpatient's department of OMFS in Saraswati Dental College & Hospital, Lucknow. Patients were randomly selected & divided into two groups Group A patients were given cryotherapy and group B patients were treated with CO2 Laser, over a time span of two years. All the patients were followed up for 1st, 7th, 14th, 30th and 90th postoperative days.
Observation & Result
Data was analyzed by SPSS software (PSAW). Pain was assessed by VAS which was found lower in laser group; mild swelling was observed in cryo group till 7th day post-operatively. On 14th day lesions in two patients treated with cryotherapy showed mild slough whereas in CO2 laser group was free from slough tissue completely. Infection was 9.1 % lower in Laser group than the Cryo group. Healing was 54.5 % better in Laser group as compared to Cryo group. No recurrence was evident in any of the patients.
Conclusion
Based on the observations, laser surgery appeared to be excellent modality due to its highest degree of surgical convenience, haemostasis, destructive action, ease of application, minimal or no intra-operative discomfort (like bleeding, injury to adjacent tissues) good access and uneventful healing, more aesthetic results with minimal scarring.

EP-MP 40
Unicystic ameloblastoma—an unwavering histopathology

Sri Gowri M

Faculty of Dental Sciences, MSRUAS, Bangalore

Abstract
Odontogenic tumors represent a spectrum of lesions ranging from malignant and benign neoplasms to dental hamartomas, all arising from odontogenic residues. This poster focuses on one such locally aggressive tumor, Unicystic Ameloblastoma. The types of treatment for unicystic ameloblastoma vary from surgical resection to conservative methods like surgical decompression, curettage and enucleation with adjuvants like chemical cauterisation, and electrocautery. Decompression is a 2-stage procedure requiring the

placement of a draining tube, followed by (delayed) enucleation of the cyst. The behaviour of the tumour is thought to become less aggressive following decompression. Decompression is the line of treatment followed in our department for unicystic ameloblastoma. Review of literature suggests that decompression led to histological changes of the cystic lining in many cysts and cyst like lesions specially in keratocystic odontogenic tumor. An institutional study was conducted to determine the histological changes following decompression, to determine whether there is any change in the cystic lining before and after decompression of the lesion in cases of unicystic ameloblastoma and to determine whether the post decompression diagnosis was consistent with the pre treatment diagnosis. The purpose of this poster is to compare the histopathologic changes of unicystic ameloblastoma before and after surgical decompression.

EP-MP 41
A huge adenomatoid odontogenic tumour of maxilla

Vilas Newaskar, Deepak Agarwal, Saurabh Gupta

Govt. College of Dentisrty

Abstract
Adenomatoid odontogenic tumour is a relatively uncommon odontogenic tumour first described by steensland in 1905.Adenomatoid odontogenic tumor (AOT) is a rare tumor of epithelial origin comprising 3 % of all the odontogenic tumors. It is a benign, painless, non invasive, and slow-growing lesion, with a relative frequency of 2.2–13 % and often misdiagnosed as an odontogenic cyst on clinical examination. AOT affects young individuals with a female predominance, occurs mainly in the second decade, and usually surrounds the crown of unerupted teeth. This lesion is most commonly located in the anterior maxilla and rarely in the mandible. It is usually associated with an impacted canine. AOT frequently resembles lesions like dentigerous cyst or ameloblastoma. AOT has three variants, follicular, extrafollicular, and peripheral. We present a rare case of 17-year-old female patient of AOT occurring in the maxilla.

EP-MP 42
"A Masquerading Lateral Swelling of the Neck"

Moinack Rudra & Sejal

M. S Ramaiah Dental College

Abstract
Salivary mucoceles can occur in both major and minor salivary glands. A ranula is a special type of mucoceles, which occurs in the floor of the mouth. A rare variety, which herniates through the mylohyoid muscle resulting as the swelling of the neck is called Plunging Ranula. A plunging ranula generally appears as a swelling in the sub mental or submandibular region. They are also known as cervical ranula or deep plunging ranula. The foremost aetiology is mostly due to the partial obstruction of the sublingual gland, followed by trauma to the duct or the gland. It appears as an asymptomatic, continuously enlarging mass and may fluctuate in size. Computed Tomography of the neck, Ultrasonography, MRIs are some of the investigations used for diagnosis of Plunging Ranula. Surgical Excision, Cryosurgery & Marsupialization are the most commonly performed procedure to treat a case of Plunging Ranula. This poster is a pictorial representation of a case of Plunging Ranula treated at our center.

EP-MP 43
A rare case presentation of gardner's syndrome

Vilas Newaskar, Deepak Agarwal, Richa Pathak

College of Dentistry, Indore MP

Abstract
Gardner's syndrome is a hereditary dominant condition comprises of multiple osteomas, cutaneous and soft tissue tumours and polyposis coli. Less common features include hypertrophy of pigmented layer of retina, thyroid tumours and liver tumours. The osteomas are largely confined to skull bones. Gastrointestinal polyps have a 100 % risk of malignant transformation and hence early detection and surgical intervention of the disease are important to prolong the life of patient. Here is presenting a case of a patient 22 years old male patient who came to Govt. College of dentistry, dept. of oral and maxillofacial surgery with complains of unilateral proptosis associated with left eye along with pain and discharge from the same. He did not reported any abdominal complains. After thorough history, careful examination and several investigations like 3D CT scan of face, multiple radiographs, fundoscopy and colonoscopy revealed the case to be of Gardner's syndrome. The proptosis was due to multiple orbital osteoms which was resected using Weber Fergusson incision. Complete and esthetically acceptable correction of proptosis was achieved postoperatively without any ophthalmic complication. Gardner's syndrome is a genetic disorder characterized by multiple colonic polyps along with tumours outside the colon including osteomas of the skull. Management of Gardner's syndrome is a challenging task especially the management of intestinal polyps for which proctocolectomy should be performed as early as possible. Osteomas and soft tissue tumours may be excised without any risk or danger or recurrence. So early detection and surgical interventions are important to give the patient best results aesthetically and functionally.

EP-MP 44
A large plunging ranula: diagnosis and surgical management

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Abstract
The term ranula is used to describe a swelling in the floor of the mouth caused by mucous extravasation or retention from the major sublingual or submandibular salivary glands. The most common presentation of ranula is a painless, slow growing, soft, and movable mass located in the floor of the mouth. Ranula may be simple or plunging. Simple ranula often present as masses in floor of the mouth, limited to the mucous membranes. Plunging ranula extend through the mylohyoid muscle or posterior to the muscle into the neck and present as cervical masses. Plunging ranula must be differentiated from other cervical swelling of neck such as thyroglossal duct cyst, brachial cleft cyst, cystic hygroma, submandibular sialadenitis, intramuscular

hemangioma, cystic or neoplastic thyroid disease. Surgery is the main stay for the management of ranulas. A variety of surgical procedures ranging from marsupialization, excision of the ranula, sclerotherapy and excision of sublingual gland has been reported for its treatment. This poster present a case of large plunging ranula. The steps in diagnosis and surgical management of the lesion is described.

EP-MP 45
Follicular odontogenic keratocyst associated with ectopic maxillary third molar in the maxillary antrum—a rare entity

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Narsinhbhai Patel Dental College & Hospital, Visnagar, North Gujarat

Abstract
Jaw cysts are very common due to the presence of odontogenic epithelium remnants. The odontogenic keratocyst (OKC) is well known for its tendency to recur, potential aggressive behaviour and defined histopathological feature but malignant transformation is rare. The odontogenic keratocyst usually occurs as a multilocular or unilocular radiolucency often in dentigerous relationship. While the most common site is the posterior portion of the mandible or the mandibular ramus, other locations have been reported such as anterior portion of maxilla and maxillary third molar area. OKC occurrence in the maxilla is unusual and its appearance in the maxillary sinus very uncommon. Here we present an unusual case of follicular OKC associated with an impacted right maxillary third molar in a 18-year-old male patient. The lesion was surgically treated in the right maxilla. Postoperative follow-up of the patient has revealed satisfactory progress without recurrence. Follicular OKC clinical features and treatment are discussed. So this poster describes case report and management of rare entity associated with ectopic maxillary third molar in the maxillary antrum.

EP-MP 46
Binder's Syndrome

Pattanshetti and Juhi Puri

Bharati Vidyapeeth Deemed University Dental College and Hospital Sangli

Abstract
Background
Binder's Syndrome or Maxillo Nasal Dysplasia is an uncommon clinical entity. It developes in the first trimester of pregnancy and has characteristic effects on facial features. These are: arhinoid face, intermaxillary hypoplasia, abnormal position of nasal bones, nasal mucosa atrophy and lack of frontal sinus. Due to this clinical appearance patient requires surgical correction.
Objective
To discuss the availability and utility of treatment options to achieve optimum results.
Methodology
Nasal and Premaxillary Augmentation using cartilage graph was done. Rhinoplasty, nasal dorsal augmentation, columellar lengthening and premaxillary augmentation was carried out.
Result
We Achieved reasonable augmentation of maxilla and nasal bone in our patient. Conclusion: This treatment modallity achieved satisfactory outcome with no significant complications

EP-MP 47
Salivary pacemaker

Abhishek

Saraawati Dental College

Abstract
The presence of saliva is usually taken for granted, and it is not required for any life-sustaining functions. Never the less, its diminution or absence can cause significant morbidity and a reduction in a patient's perceptions of quality of life. Xerostomia is the medical term for the subjective complaint of dry mouth due to a lack of saliva. It is sometimes colloquially called pasties, cottonmouth, drooth, dough mouth or des (like a desert). Several diseases, treatments and medications can cause xerostomia. It is also common in smokers. Although some treatments have been used to improve the symptoms of xerostomia, none is completely satisfactory for the patients who suffer of this alteration. In the last few years non-pharmacological treatments based on electro-stimulation for the treatment of xerostomia have been developed by applying neuro-electro-stimulation by miniaturized intra-oral electro-stimulators. These devices increase salivary secretion and improve symptoms of oral dryness. Their effect is obtained by means of stimulation of the lingual nerve, in whose proximity the electrodes of the apparatus are placed. The objective of this mechanism is both to directly stimulate the salivary glands controlled by that nerve and to enhance the salivary reflex.

EP-MP 48
Role of coronoidectomy in treating oral submucous fibrosis: a case series

Karan Makadia, Anil Managutti

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Abstract
Restricted mouth opening has serious health consequences such as malnutrition due to impaired mastication, compromised oral hygiene and difficulty in speech, hampering the functional integrity of stomatognathic system. Reduced mouth opening is found in the OSMF cases, where inelastic fibrous tissue accumulates in the juxtaepithelial region resulting in stiff oral mucosa. Apart from this, muscle degeneration leads to fibrosis of temporalis muscle, further limiting the mouth opening. In the management of OSMF, bilateral fibrotomy and temporal myotomy has been subjected as a standard treatment modality. But in the cases where these standard treatment modalities failed to deliver satisfactory intraoperative results coronoidectomy plays an important role in increasing mouth opening. We hereby present three cases clinically diagnosed as grade III/IV OSMF who underwent surgery involving coronoidectomy in addition to conventional surgical procedures followed by vigorous mouth opening exercises. Coronoidectomy after fibrotic band release gave excellent

results with adequate mouth opening and no recurrence until the last follow up.

EP-MP 49
Benign schwannoma involving the submandibular gland: A case report

Vishal Bansal, Avi Bansal, Manoj Kumar Yadav

Subharti Dental College Meerut U.P

Abstract
Schwannomas are benign tumors arising from Schwann cells of the sheaths of peripheral nerves. 25–45 % of schwannomas are located in the head and neck region and more than 10 % involve the submandibular gland. We describe a rare case of schwannoma of left submandibular salivary gland. A 19-year-old male with an unremarkable medical history presented to our department with a history of an asymptomatic, slow growing swelling at the left submandibular region for the past 5 years. Clinical examination revealed a well-defined mass at the left submandibular region measuring 6 x 4 cm in size. The mass was non tender, not fixed and non-pulsatile. No neurological deficit was present. Intra-orally floor of the mouth was elevated. Contrast computed tomography showed a well circumscribed mass which was hypo-echoic with foci of calcifications in left submandibular gland. FNAC was not conclusive. Excisional biopsy was performed via extra-oral approach and noticed tumor was confined to deep lobe. Histo-pathological report revealed it as shwannoma of the submandibular gland, retrospectively author recollected that intra operatively the capsule of the deep lobe of submandibular gland was adhered with numerous parasympathetic fibers arising from lingual nerve. Hence it can be concluded that it is a benign schwannoma arising from parasympathetic fibers involving deep lobe of left submandibular gland. Patient recovered uneventfully and is kept on regular follow up.

EP-MP 50
A Retrospective review of treatment of the KCOT over a period of 7 years (2008–2014)

Sujata Mohanty, Sandeep

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Abstract
The KCOT is an epithelial developmental cyst of the jaws. This lesion is commonly found in the maxilla and mandible, and can become quite large because of its potential for significant expansion, extension into adjacent tissues, and rapid growth. The treatment of the KCOT remains controversial. The goals of treatment should involve eliminating the potential for recurrence while minimizing the surgical morbidity. There is no general consensus on adequate or appropriate treatment of this lesion. Treatment is either conservative or aggressive. Conservative treatment generally includes decompression, marsupialisation, simple enucleation using spoon curettes, enucleation with chemical cauterization, peripheral ostectomy, chemical curettage with Carnoy's solution.Aggressive treatment generally includes and resection with or without reconstruction.
Objective
We analyzed the age, gender, histological types, surgical treatment provided and recurrence rate.
Results
Total pt-87 Total site-112 Age = (4–72yrs) mean-32.17yrs Male = 59, Female = 28, M:F = 2.5:1 Histological Types- parakeratinized = 80 orthokeratinized = 11 infected lining = 14 non descriptive = 7 Surgical Treatment Decompression = 7 Marsupalisation = 45 Enucleation = 14 Enucleation with carnoys solution = 23 Enucleation with peripheral ostectomy = 7 Enucleation with carnoys and peripheral ostectomy = 15 Complete resection with plate reconstruction = 1 Recurrence Rate = 8.9 % (10).

EP-MP 51
Calcifying epithelial odontogenic cyst: a case report

Priyank Rai

Jodhpur Dental College & General Hospital

Abstract
Introduction
The term calcifying odontogenic cyst was first introduced by Gorlin in 1962. It represents 2 % of all odontogenic pathological changes in the jaw. The Calcifying Odontogenic Cyst usually arises intraosseously, but it may also occur extraosseously, with about equal frequency in the mandible and maxilla (1:1). The age of the patients may range from 5 to 92 years, with peak incidence in the second and sixth decade of life. Radiographically, the lesion appears as a unilocular or multilocular well defined radiolucency that may contain small irregular calcified bodies of varying sizes and it may be associated with an odontome or an unerupted tooth.
Case report
A 17 year old girl complained of painless swelling in the right bicuspid and molar region of mandible since 6 months. Extraorally the lesion did not produce any obvious swelling and can be felt only on palpation. Intraoral examination revealed a firm, uniform enlargement of the buccal cortex of right mandibular quadrant extending from the right premolar up to the second molar of mandible. The overlying mucosa was normal. The detailed intraoral examination revealed no mobility or tenderness to palpation with any tooth. There was also no sign of caries, pulp pathosis or periodontitis.
Discussion & conclusion
As reports in literature increased, Calcifying Epithelial Odontogenic Cyst was classified as heterogenous group of entities with distinct histopathological finding that included solid tumor. In spite of the low frequency of this lesion, and the fact that most cases are surgically removed and heal uneventfully, however, in this case with ameloblastomatous proliferation a close follow up is needed and also there have been reports of association with carcinoma, adenomatoid odontogenic tumor and ameloblastoma.

EP-MP 52
Recurrent ranula—a case report

Sabita Kumari

Al-ameen Dental College and Hospital Bijapur

Abstract
Introduction
Ranula is a rare cystic lesions resulting from damage or rupture of one or more sublingual gland on the oral floor. When the mucocele

extends and passes the sublingual space and invades the submandibular space it may be called plunging ranula whose etiology is completely unknown. There is lack of consensus about the appropriate treatment of ranula.

Aim & Objective

Aim of the procedure was to completely remove the pathology which had recurred after primary invasive procedures.

Methodology

To remove the pathology completely and along with the removal of gland.

Result

No recurrence was seen after the excision of the ranula and the gland even after follow up of 6 months.

Conclusion

Effective treatment is removal of the involved unit of sublingual gland or inducing sufficient fibrosis to seal the leak through which the mucous extravasates.

EP-MP 53
Immediate primary reconstruction of hemi mandible after resection for aggressive Keratocystic Odontogenic Tumor (a case report)

K. Y. Giri, Shazia Safi

Institute of Dental Sciences, Bareilly

Abstract

Introduction

The keratocystic odontogenic tumour is classified as a developmental cyst derived from the enamel organ or from the dental lamina. In 2005, the WHO established a new classification to the former known Odontogenic Keratocyst, which is now known as Keratocystic Odontogenic Tumor. It is considered to be one of the most aggressive type of cyst due to its invasion ability in the bone and also due to its high recurrence rate. The treatment choice must take into account factors such as size and location of the tumor, as well as invasion of the surrounding tissues and previous treatments. A variety of different treatment modalities have been proposed in the literature, ranging from conservative methods such as marsupialization to more aggressive ones such as resection. However, there appears to be a consensus among most authors, according to which an association of techniques seems to be the best choice, for instance, decompression & enucleation, marsupialization & curettage, or enucleation & Carnoy's solution.

Aim

The aim of this poster presentation is to discuss a case on OKC with primary reconstruction.

EP-MP 54
Septic cavernous sinus thrombosis—a case report

Manjari P V S

CKS Theja Institute of Dental Sciences and Research, Tirupathi

Abstract

Cavernous sinus thrombosis, as the name states is the formation of blood clot in the cavernous sinus. It is important to know that cavernous sinus thrombosis affects cranial nerves III, IV and VI which are necessary for eye movement and cranial nerve V which gives sensation to the top and middle portion of the face. Therefore it is a serious life-threatening infection that requires accuracy of medical and surgical intervention. A case of cavernous sinus thrombosis was presented in our department with typical clinical features involving edema of eyelids, ptosis, chemosis, retinal haemorrhage, dilatation of pupil, cellulitis of right side of the face and fever. The diagnosis was based on case history and clinical presentation of the condition. A heavy dose of antibiotics were started immediately and the prognosis from this condition was excellent with the advent of antibiotics.

EP-MP 55
Maxillary necrosis due to mucormycosis—a case report

K. Durga Prasad

CKS Theja Institute of Dental Sciences and Research

Abstract

The maxilla rarely undergoes necrosis due to its rich vascularity. Maxillary necrosis can occur due to bacterial infections such as osteomyelitis, viral infections such as herpes zoster or fungal infections such as mucormycosis, aspergillosis etc. Mucormycosis is an opportunistic fulminant fungal infection, which mainly infects immunocompromised patients. The infection begins in the nose and paranasal sinuses due to inhalation of fungal spores. The infection can spread to orbital and intracranial structures either by direct invasion or through the blood vessels. The fungus invades the arteries leading to thrombosis that subsequently causes necrosis of hard and soft tissues. We report a case of maxillary necrosis by mucormycosis in an uncontrolled diabetic patient to emphasize early diagnosis of this potentially fatal fungal infection. Early diagnosis and prompt treatment can reduce the mortality and morbidity of this lethal fungal infection. We present a case of mucormycosis involving the maxilla. Patient reported with a extra oral swelling since 3 months and she is known diabetic since 5 years. Intra oral necrotic bone is observed. Patient was kept on antibiotics and proceeded for further treatment.

EP-MP 56
Complex odontoma of maxilla—a case report

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Government Dental College & Hospital Hyderabad

Abstract

Odontomas are the most common odontogenic tumours. They are broadly classified into Compound Odontoma and Complex Odontoma. Among them complex odontoma is a rare tumor. complex type is an agglomerate of all the dental tissues that are characterized by normal histodifferentiation but abnormal morphodifferentiation producing little or no resemblance to normal tooth form. They are usually asymptomatic but often associated with eruption disturbances. Here I am going to present a poster on a case of unusual large complex odontoma of maxilla that was associated with an impacted molar in a young boy. The tumor was treated by surgical excision under general anesthesia.

EP-MP 57
Key for maxillary sinus surgery

Meena Vora, Ridhima Waghule

Y. M. T Dental College and Hospital, Kharghar, Navi Mumbai

Abstract
Endoscope is a device with a light attached that is used to look inside a body cavity or organ. Functional Endoscopic Sinus Surgery (FESS) is highly sophisticated type of surgery. It facilitates diagnosis and treatment by removal of tissue obstruction and facilitation of drainage while conserving the normal non obstructing anatomy and mucous membrane. It also avoids external scars. It provides intraoperative visualization allowing surgery to be focused on the key areas. The true advantage of technique is that even in case of massive disease, radical resection procedures can be avoided by re-establishing sinus ventilation and drainage via the natural ostia. Radical resection of lesion causes blood loss, morbidity and facial disfigurement which can be avoided by FESS. Also this technique permits rapid tissue healing.

EP-MP 58
Treatment modalities of unicystic ameloblastoma

Jyotsna Rajan, Abhay T. Kamath, K. M. Cariappa

Manipal College of Dental Sciences, Manipal

Abstract
Ameloblastoma is a slow-growing, persistent and locally aggressive neoplasm of epithelial origin, which can be classified into the following types: conventional, unicystic and peripheral. Of these, unicystic ameloblastomas (UA) are a less encountered variant, showing clinical, radiological or gross features of an odontogenic cyst, but histopathologically show the typical epithelium lining the cyst cavity, with or without luminal and/or mural tumor proliferation. It is thought to be less aggressive, favouring a conservative type of management. Treatment modalities for UA have reached a general consensus as follows- 1) conservative management by enucleation and curettage; with marsupialization to decrease the size of the cavity followed by a second stage surgery or 2) segmental or marginal resection followed by reconstruction. While an aggressive approach showed least recurrence, conservative management is gaining popularity as it leads to a better quality of life. The choice of management should be evidence-based, taking into consideration age of the patient, size of the tumour, histopathology of the tumour and the patient's desire.

EP-MP 59
Osteoradionecrosis-pathophysiology and treatment modalities

S Mohan, Ancy Babu

Government Dental College Kottayam

Abstract
Osteoradionecrosis (ORN) of the jaws is a significant complication of radiation therapy in the management of head and neck cancer. Treatment of ORN is often complex and multi-modal. Early theories about its pathophysiology including radiation, trauma and infection are widely recognized. The theory of hypoxia, hypovascularity, hypocellularity have guided newer development in treatment like hyperbaric oxygen therapy. More recent developments in ellucidation of the pathophysiology of the lesions in ORN have focused on the presence of radiation induced fibrosis and have allowed development of the potential treatment modalities like pentoxifylline and tocopherol. This poster gives a review of literature and clinical effect of pentoxifylline and tocopherol in the management of ORN.

EP-MP 60
Osteomyelitis of zygoma secondary to fracture of parietal bone

Akshay Shinde

Government Dental College and Hospital, Shimla

Abstract
A 21 year old male reported to our department with a chief complaint of pus discharge and exposed bone on right side of face below eye since 5 months. Patient gives alleged history of trauma to right side of skull 9 months back. He was diagnosed with depressed fracture of parietal bone with subgaleal abscess formation which eventually led to osteomyelitis of parietal bone. By the time patient referred to us he developed a sinus with pus discharge from a wound at the lateral one-third of infraorbital rim with exposed underlying bone while the lesion over parietal region of scalp was regressed by then. Investigations proved this lesion to be osteomyelitis of zygoma. Partial sequestration with curettage of zygomatic bone was carried out with antibiotic coverage. As stated in literatures, osteomyelitis of midface region is rare. This made us to investigate further in the case. It was deduced that depressed fracture of parietal bone led to the hematogenous osteomyelitis of zygoma.

EP-MP 61
Ameloblastoma—a case report

S. Magesh Prashanth

Sree Balaji Dental College and Hospital

Abstract
Ameloblastoma is an odontogenic tumor of epithelial origin that has received considerable attention due to its frequency, clinical subtypes and high tendency to Infiltrate and recur. It is the most common odontogenic neoplasm affecting the jaws, and it accounts for 11 % of all odontogenic tumors. It is an aggressive benign tumor that may originate from enamel organ, remnants of dental lamina, epithelial lining of an odontogenic cyst, or basal epithelial cells of the oral mucosa. It often presents as a slow growing, painless swelling, causing expansion of the cortical bone, perforation of the lingual and/or buccal plates and infiltration of soft tissue.
Background
When determining the treatment for Ameloblastoma, planning must factor in the patient's age, anatomy, location and extent of the lesion. Careful consideration of treatment to provide long term good facial aesthetics, functional movement of jaws and to avoid reoccurrence of the lesion and types of treatment for management of a ameloblastoma in

mandible is substantially different from that of the other odontogenic and non odontogenic tumors.such as resection and enucleation etc.

Objective

It is a very common effective procedure, with successful results.

Methodology

The universal surgical treatment for ameloblastoma such as Enucleation and reconstruction of the defect followed by resection of the jaw avoids post-operative reoccurrence of the lesion, metastasis of the lesion to the vital organs.

Conclusion

Ameloblastoma is unicentric benign tumor with higher chances of malignant transformation and metastasis, so resection and reconstruction of the lesion site with reconstruction plate or graft is mandatory ang gives good result.

EP-MP 62
Idiopathic gingival fibromatosis: Case report and Literature review

Kriti Hazarika, A. K. Adhyapok, Subhas C. Debnath

Regional Dental College, Guwahati

Abstract

Background

Idiopathic gingival fibromatosis is a rare condition, where there is slow progressive enlargement of maxillary and mandibular gingiva of undetermined cause. The other causes of gingival hyperplasia must be ruled out to diagnose idiopathic gingival fibromatosis. Although the gingival overgrowth is painless, it can result in aesthetic and functional problems.

Objective

Only a few cases of idiopathic gingival fibromatosis have been reported till now. This presentation is aimed to report a case and review the available literature to discuss the diagnosis and surgical treatment modalities of idiopathic gingival fibromatosis.

Method

In our case, surgical excision of the gingival overgrowth was done followed by application of soft liner on the raw tissue which enhanced healing.

Result

The healing was uneventful. The patient has been followed up for 1 year and there is no evidence of recurrence.

Conclusion

Although idiopathic gingival fibromatosis is painless slowly progressive enlargement of gingiva, treatment bcomes necessary for the correction of associated cosmetic disfigurement and functional disharmony. Surgical excision is the treatment of choice and soft liner over the raw tissue surface results in enhanced healing.

EP-MP 63
Plasmacytoma of mandible—a rare clinical entity

Chandan Misra, Col PK Chattopadhyay

Army Dental Centre (R & R), Delhi

Abstract

Background

Plasmacytoma is a discrete, solitary mass of neoplastic monoclonal plasma cells in either bone or soft tissue (extramedullary). It rarely involves jaws and when seen, only 4.4 % occur in the mandible. The clinical findings are often non-specific making an early diagnosis difficult.

Objective

To report a rare case of a 35 year old female patient with plasmacytoma of left angle of mandible.

Methodology

An incisional biopsy of the osteolytic lesion spanning mandibular left parasymphysis to condylar neck region was done which revealed microscopic picture suggestive of keratocystic odontogenic tumor. A segmental resection of mandible without disarticulation was carried out which on histopathologic examination revealed diffuse sheets of plasma cells suggestive of plasma cell myeloma. Subsequently, immunohistochemistry, bone marrow aspiration, serum free light chain assay, B2 microglobulin and PET scan were carried out.

Results

Presence of IHC markers CD38, CD138, lambda light chain, neoplastic plasma cells and multiple skeletal osteolytic lesions led to the final diagnosis of plasmacytoma progressing to multiple myeloma. Patient is presently undergoing chemotherapy and under constant follow up.

Conclusion

Plasmacytoma rarely affects mandible and absence of characteristic symptoms viz. bone pain, pathologic fractures, anaemia and hypercalcaemia makes diagnosis difficult.

EP-MP 64
Enucleation of solid ameloblastoma as a therapeutic modality; a pilot case

G. K. Thapliyal, Nishant Singh, Rahul Deb

Rama Dental College and Hospital

Abstract

Ameloblastoma is a benign odontogenic tumor of epithelial origin which is the second most common tumor occurring in the oral cavity after odontome. According to the current World Health Organization (WHO) classification of odontogenic tumors, ameloblastomas are divided into 4 types: Solid/multicystic, extraosseous/peripheral, desmoplastic and unicystic. Solid Ameloblastoma may manifest with a number of histological patterns, including the follicular, plexiform, acanthomatous, keratinizing, desmoplastic, granular cell, basal cell, and clear cell types. In spite of the apparent and gross circumscription of the ameloblastomas, they have the potential for recurrence because they fail to produce a capsule; it is therefore recommended that they should always be treated by complete surgical resection. In this case report we present a case of Plexiform Ameloblastoma in a 18 years old female patient treated with enucleation and Carnoy's solution.

Objective

Radical surgical resection, followed by the reconstruction of the defects, is the most preferred treatment of choice for solid ameloblastoma. The cases treated conservatively show higher tendencies of recurrence. Considering the age of the patient and the esthetic requirement this is a pilot study outlines the conservative treatment protocol for solid plexiform ameloblastoma.

Result

The patient has been followed up for 2 years and remained disease free.

Conclusion

This pilot study shows solid ameloblastoma in young patients can be treated with enucleation and use of carnoy's solution with no recurrence. Though more cases required with follow ups to prove this treatment protocol.

EP-MP 65
Treatment of aggressive fibromatosis in the temporal region

Nishath

Vydehi Institute of Dental Sciences

Abstract
Aggressive fibromatosis is also known as desmoid tumour and frequently arises from abdominal musculature. Fibromatosis is a non-metastasizing tumor. It is fibroblastic growth of unknown pathogenesis involving voluntary muscle as well as fascial and aponeurotic structures. Histologically, it is indistinguishable from an abdominal fibromatosis having strong tendency for local recurrence and is an aggressive infiltrating growth. Historically, Bennet in 1849 reported fibrinoid carcinoid growth in the thigh, upper extremity and parotid region. Nicolas in 1923 was the first to define extra-abdominal desmoids tumour. Masson in 1966 reported on clinical and pathological findings of fibromatosis in head and neck region. Here is an illustration of a case report of a 47 years / female who was diagnosed and treated with surgical excision in our institution. This poster draws light on a rare case of fibromatosis in the temporal region and its subsequent treatment.

EP-MP 66
A conservative management of haemangioma in esthetic zones of maxillofacial region with sodium tetracydl injections

Neelkamal Hallur, Aaisha Siddiqua, Syed Zakaullah, Ashwin Shah, Chaitanya Kothari, Shereen Fatima, Meenakshi Kothari, Juhi Shabnam, Mitilesh Shetty

Al-badar Rural Dental College and Hospital

Abstract
Haemangiomas are rarely occurring vascular tumors. These are most common tumor of infancy (10 %) with F:M ratio 3:1, 60 % occur in head and neck. They can cause esthetic and functional impairment, depending on location. The most common site is the upper lip but can occur on tongue, buccal mucosa and palate. MRI, USG, CT Angiography techniques are used as diagnostic aids. Treatment is primarily dependent on correct diagnosis of the lesion and on its anatomic location. Of the conservative modalities for hemangioma as well as vascular malformations. Sclerotherapy is an effective method which produces endothelial damage that results in permanent endofibrosis and clinical obliteration of the vessel. Various sclerosing agents used are osmotic agents, hypertonic saline solution, detergent solutions like sodium morrhuate, ethanolamine oleate, sodium tetradecyl sulphate, polidocanol & sclerosant foam. These agents induce sclerosis on venous endothelium via interference with cell membrane lipids until either diluted or inactivated by serum surfactants. Our cases of Hemangioma on esthetic zone of maxillofacial region were successfully managed with sclerotherapy using sodium tetradecyl sulphate injections, using Computed Tomographic Angiography as ligation of feeding vessels.

EP-MP 67
Parotid angiofibroma—a case report

Neelkamal Hallur, Aaisha Siddiqua, Syed Zakaullah, Ashwin Shah, Chaitanya Kothari, Shereen Fatima, Meenakshi Kothari, Juhi Shabnam, Mohammed Tasveem Ustad

Al-badar Rural Dental College and Hospital

Abstract
Angiofibroma are rare, benign, locally invasive vascular tumours, which represent 0.05–0.5 % Most frequent site of occurence is the Posterior Naso-pharynx and here it is called as Naso-pharyngeal Angiofibroma[NA]. When these arise outside the Naso-pharyngeal region they are termed as Extra-naso-pharyngeal Angiofibroma[ENA]. Only 65 cases of ENA reported, most common site being maxilla followed by ethmoid. Unlike NA, lack of hyper-vascularity on conventional angiograms does not exclude the diagnosis of ENA. ENA arising from the superficial lobe of Parotid Gland has not been reported in the literature so far and we report the First case in a 54yrs. male patient with swelling in right preauricular region, overlying skin was normal, ear lobe raised, swelling was movable. USG, a large lobulated solid mass of 6 x 4 cm with multiple vessels with low velocity flow, no calcification or cystic changes, suggestive of a low-grade vascular tumour, CT scan, a large well-circumscribed, solitary isodense lesion measuring 6.36 x 4.39 cm to be Mixed Parotid Tumour, while FNAC was favouring a Vascular lesion. Classical Superficial Parotidectomy done with modified Appiani-incision with preserving all the branches of Facial nerve. Histo-pathological and Immuno-histochemistry examination confirmed as -Angiofibroma.

EP-MP 68
Management of kcot: a surgeons dilemma

T Balasundaram, P K Chattopadhyay, R S Semi

Army Dental Centre (Research and Referral)

Abstract
Keratocystic odontogenic tumor (KCOT) formerly known as odontogenic keratocysts is a unique cyst because of its locally aggressive behavior, high recurrence rate, and characteristic histological appearance and comprises approximately 11 % of all cysts of the jaws. WHO justifies the term keratocystic odontogenic tumour as it better reflects its neoplastic nature. Management of the keratocystic odontogenic tumor has been one of the most controversial issues among the maxillofacial surgeon particularly large lesions. Though literatures advocate resection for large cyst to prevent recurrences, but it ultimately leads to morbidity. The eradication of the cyst and the reduction of risks of recurrence and surgical morbidity are main goals of all techniques. The type of treatment rendered is controversial, but depends on several factors including patient age, location and size of the lesion, and whether the KCOT is primary or recurrent. Based on our experience in managing large KCOT, we advocate that though these lesions are aggressive, they can be managed conservatively with adjunctive procedures like peripheral ostectomy and chemical cauterization yielding good

prognosis in comparable to the radical approach for the same size of the lesion.

EP-MP 69
Retrograde dissection of facial nerve in superficial parotidectomy—a case report

Manoj Kumar K. P, Benny Joseph, Jasly. K

KMCT Dental College

Abstract
Background
There are two basic techniques for the identification and dissection of the facial nerve. One is the forward or anterograde dissection, where the approach to the main trunk is taken as an early step, tracing it to the bifurcation and peripheral branches. The other technique is the retrograde dissection, where the peripheral branches are identified first, then proximally to the bifurcation or main trunk.
Objectives
To preserve facial nerve during superficial parotidectomy by retrograde dissection.
Methodology
I am reporting a case of surgical excision of pleomorphic adenoma with preservation of facial nerve. Patient named alavi 45/male reported in KMCT Dental College with complaint of swelling in right side of face.After clinical, radiological and histological evaluation, we diagnosed it as pleomorphic adenoma. The retrograde approach to facial nerve dissection is used in parotid surgery.
Result
By retrograde dissection, facial nerve has been preserved and reduced post operative complications compared to anterograde dissection.
Conclusion
Superficial parotidectomy is commonly used in the treatment of superficial parotid tumors. It is essential that, where possible, the facial nerve should be preserved. Identification and careful dissection of facial nerve is of paramount importance. The advantages of the retrograde technique include: selective exposure of the branches of the nerve, avoidance of unnecessary exposure of the trunk, with subsequent reduction of serious damage, shorter operating time, reduced intraoperative blood loss, less normal parotid removal, and a more favorable cosmetic Outcome.

EP-MP 70
Multiple KCOT's in jaws: Is it always syndromic?

Ritesh Rajan, P.Abhinand, Mohammed Minhaj Ahmed Amer

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Abstract
Gorlin-Goltz syndrome is an infrequent multisystemic disease that is inherited in an autosomal dominant way showing a high level of penetrance & variable expressiveness. It is about a multisystemic process that is characterized by the presence of KCOT's in the jaws, multiple basal cell nevi or carcinomas, palmar and/or plantar pits & calcification of falxcerebri. We report here a rare case of Gorlin-Goltz syndrome. Our case highlights the importance of the awareness of this rare syndrome, because early verification of the disease prevents recurrence and better survival rates from the existent disease.

EP-MP 71
Management methods of odontogenic kerato cyst

A. P. Mohan, K.A. Jeevan Kumar, B. Pavan Kumar, Santhosh

Kamineni Institute of Dental Sciences

Abstract
Background
The mode of expansion of odontogenic keratocyst and it's management.
Objective
To discus and a evaluate treatment modalities which minimize or prevent &recurrence of o.k.c. and reconstruction of the defect.
Methodology
Management done by enucleation, marsupilisation, enbloc or segmental resection followed by reconstruction using the fibular flap or forearm flap or rib graft.
Result
Small cyst can managed by enucleation&marsupilisation but large cysts are managed by surgical and enbloc resection if lesin reccures.
Conclusion
The methods of prevention of o.k.c.by surgical and enbloc resection & reconstrucion using fibular flap or forearmflap or rib grft.

EP-MP 72
Multiple complex and compound odontoma

Mainak Kundu

Sri Hasanamba Dental College and Hospital

Abstract
Def
An odontoma is a benign tumour of odontogenic origin, specially it is a dental hamartoma, meaning that is a composed of normal dental tissue that has grown in an irregular way This poster presents a case report of 6 year old boy having a painless lobulous diffuse swelling in labial vestibule of left maxillary front region since 6 months. No history of eruption of primary teeth in the same region. Opg reveals unerupted and forming teeth buds of permanent teeth with multiple radiopaque tooth like structures suggestive of compound odontome. Multiple odontomes removed under local anaesthesia (compound as well as complex). A PRF placed in the cavity after through debridement.closure achived using 3-0.
Objective
This type of cases should be treated at the early age only, as soon as the diagnosis is done.
Methodology
This type of cases are treated by surgical removal under LA or GA.
Results
Completely removal of all odontomes are possible in early age without any complications.
Conclusion
If these type of cases are treated in early age, there are so many complications that can be avoided in future.

EP-MP 73
Giant ossifying fibroma of maxilla: a case report

Sujata mohanti, Saroj kumari

Maulana Azad Institute of Medical Sciences

Abstract
Ossifying fibroma is a slow growing fibro-osseous tumor which is well demarcated from adjacent bone. Some lesions may grow to massive size, causing considerable esthetic and functional deformity. It usually occurs in patients in the second to fourth decades of life. Site of occurrence can be mandible, maxilla, other cranial and facial bones like frontal, ethmoid, sphenoid, and temporal bones. The clinical presentation is usually a spherical or ovoid jaw bone mass, painless and expansive, that may displace the roots of adjacent teeth and sometimes cause root resorption. Early lesions are small and radiolucent. Later they become mixed radiolucent-radiopaque and finally completely radiopaque. In this case report, a case of giant ossifying fibroma of maxilla in 25 year old female patient reported with 10 year progress history. It was associated with severe esthetic & functional deformity of affected left maxilla along with compressed mandible. CECT face & neck revealed large, exophytic well defined lytic sclerotic mass lesion involving left maxilla. Elective tracheostomy was done preoperatively i/v/o difficult airway. Total maxillectomy was performed under GA by Modified Weber-Fergusson incision with Diffenbach's extension.

EP-MP 74
Unicystic ameloblastoma—a case report

P.Balreddy, L. J. Sushma

Government Dental College, Hyderabad

Abstract
Ameloblastoma is a common benign odontogenic tumor of the jaw with a locally invasive and highly destructive behaviour and can develop in any age with peak prevalence in 3rd to 4th decade. It comprises 11 % of all odontogenic tumors. Ameloblastoma occurs in all areas of jaws but mandible is the most commonly affected area with molar angle ramus area commonly involved. Ameloblastoma can be classified as intraosseous which includes solid and cystic variants, peripheral or extraosseous type. Treatment varies from conservative management to radical excision. Here I am going to present a poster of unicystic ameloblastoma involving right side of the body and angle of the mandible, which is treated by resection and followed by reconstruction with reconstruction plate.

EP-MP 75
Evaluation and efficacy of micro-nutrients and physiotherapy in management of oral submucous fibrosis

M. K. Gupta, Sagar A. Naidu

Swargiya Dadasahed Kalmegh Smruti Dental College and Hospital, Nagpur

Abstract

Background and Objective
Oral submucous fibrosis (OSMF) is a well-known premalignant condition encountered in Indian population. Although the disease is advancing rapidly, its reliable treatment modality for its various stages has not yet evolved. The aim of the present study is to compare the effect of micronutrients and physiotherapy with a placebo in conjunction with the cessation of causative habit in the treatment of OSMF.
Methodology
45 patients with oral submucous fibrosis were randomly divided in three groups. Group I—Patients received micro-nutrients along with physiotherapy exercises. Group II—Patients were advised physiotherapy exercises. Group III—Patients were given micronutrients supplements. These patients were evaluated at 1st, 2nd & 4th weeks.
Results
Mouth opening values for the patients of group I showed significant improvement at the end of four weeks as compared to the initial mouth opening. Group II showed least improvement.
Conclusion
Conservative management with micro-nutrients and physiotherapy is very effective for oral submucous fibrosis.

EP-MP 76
Osteosarcoma of maxilla—a case report

K. George Varghese, S. Mohan, Alshakhir. P. K

Govt. Dental College Kottayam, Kerala

Abstract
Background
Osteosarcomas are the most common primary malignant tumour of the long bones. It is rare in jaw bones with more predilection towards mandible. Osteosarcoma of the jaws presents a lower incidence of metastasis and a better prognosis than osteosarcoma of the long bones. Early diagnosis and adequate surgical resection are the keys to high survival rates. Case report—A 38 year old women reported with pain and swelling in relation to right cheek. On examination an ulceroproliferative bony hard swelling of size 5 × 4 cm was identified on right posterior maxilla extending into maxillary sinus and hard palate without involving orbit. Associated teeth were mobile. Malignant bone tumor was suspected. Histopathological examination confirmed it as chondroblastic osteosarcoma. It was treated with neo-adjuvant chemotherapy followed by sub-total maxillectomy and reconstructed with obturator. Post-surgical radiation was considered for adjuvant treatment. Patient is under follow up for past one year without recurrence.
Conclusion
Osteosarcomas of the jaws have a favourable outcome in comparison with those of long bones. Resection of such lesions though challenging may lead to cure and neo-adjuvant chemotherapy may have a role to play.

EP-MP 77
Peripheral ossifying fibroma—a dilemma

Naveen Kumar Jain

Government Dental College Trivananthapuram

Abstract

Peripheral ossifying fibroma is a gingval growth usually arising from interdental papilla and occur frequently in anterior maxilla. Other terms used to describe this lesion include peripheral cementifying fibroma and calcified or ossified fibrous epulis. It requires proper treatment protocol with close postoperative follow up. This case represents a 22 year old lady with unusually large lesion in relation to labial aspect of mandibular anterior teeth and it's management.

EP-MP 78
Solitary cysticercosis of the temporalis muscle a report of a rare case

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Institute of Dental Sciences Bareilly

Abstract
Taenia solium infestation is one of the neglected tropical diseases of worldwide public health importance. Infection with the larval (cysticercus) stage of T. solium leads to cysticercosis commonly involving the brain, meninges, and eyes, which together constitute 86 % of the cases. The remainder are located in the muscles, subcutaneous layers, liver, heart, lungs, and peritoneum. Cases in the maxillofacial region, including the tongue and cheek muscles, are rarely reported. We report a rare case of cysticercosis involving the temporalis muscle. Ultrasonography and CT scan played a decisive role in the diagnosis. The present case is reported as fifth case till now in the literature based on pubmed search. Patient presented with swelling over right temporal region with reduced mouth opening (12 mm IID). The provisional diagnosis was thought to be temporal space infection but OPG was found to be non-remarkable ruling out the odontogenic infections causing further dilemma over the diagnosis. Ultrasonography revealed hypoechoic area in right temporalis muscle and small well defined cystic lesion with nodular hyperechoic (nodule) scolex seen within the cystic lesion. CT scan confirmed the presence of cysticercus in right temporal region. Pharmacological management was instituted and the cyst was resolved completely with improvement in the mouth opening and swelling.

EP-MP 79
A review of central giant cell granuloma

Aashish Deshmukh, Ayeshwarya Chaudhary

YMT Dental College & Hospital, R. G. Institute, Kharghar

Abstract
Central Giant cell Granuloma (CGCG) is a benign, proliferative lesion of the jaw characterized by the presence of numerous multi nucleated giant cells in a fibrous stroma histologically. The two main types viz. aggressive & non aggressive are classified on the basis of behavior of the lesions. Radiographically it appears as multilocular radiolucencies. With the advances in understanding the etiopathogenesis of the lesion, there have been many non surgical & surgical approaches to the management of the lesion. We present here a review of the classification & management guidelines for the CGCG.

EP-MP 80
Calcifying epithelial odontogenic tumor—a case report

Jayesh Rajendra Heda

Pravara Institute of Medical Sciences, Rural Dental College, Loni

Abstract
The calcifying epithelial odontogenic tumor (CEOT), also known as the Pindborg tumor, is a benign and rare odontogenic tumor accounting for 0.4–3 percent of all odontogenic tumors. The most frequent location is the mandibular premolar and molar area; less frequently the lesion is found in the maxilla. Pindborg tumour is usually detected in an asymptomatic patient and discovered only through routine radiographic examination, it may present as a slow growing, painless, expansile bony hard swelling causing cortical bone to become egg shell thin before perforation and subsequent soft tissue infiltration. It may cause tooth tipping, migration, rotation and/or mobility secondary to tooth resorption. A patient reported in our department for complaining of pain & swelling in lower front region of jaw. On Histopathological examination it revealed calcifying epithelial odontogenic tumor of mandibular anterior region which is rare.

EP-MP 81
Post ankylotic TMJ reconstruction using costo chondral grafts

Saurabh Arya

Govt Dental College and Hospital Shimla

Abstract
Background
Ankylosis of the temporomandibular joint (TMJ) is a crippling and debilitating condition of the jaws causing long term functional, esthetic and severe psychological impact on the lives of these patients. Trauma has been implicated as the most common etiological factor in temporomandibular joint ankylosis in adults as well as the pediatric age group. Management of ankylosis in children can be very challenging and our aim was to correct retrognathia in bilateral cases and reduce the possibility of further asymmetry in unilateral cases. Growth centre transplantation using costochondral grafts was done in seven growing children in 6–13 year age group.
Objective
Patients were assessed for- 1. maximum inter-incisal opening pre & post operatively 2. restored vertical ramal height 3. occlusion 4. facial symmetry 5. post operative complications. Radiographic evaluation consisted of panoramic radiography and CT scans in axial, coronal and sagittal sections with 3D reconstruction. The use of costochondral graft in reconstruction has benefits of growth potential and ability to remodel into a neocondyle with time. Unpredictable growth pattern of the CCG, midline shift and donor site morbidity are some of the disadvantages of this technique. We assessed the same using panoramic radiographs during follow ups.
Results
The costochondral grafts showed excellent mandibular growth along with complete integration of graft into the recipient site over the

passage of time in all seven cases. The costochondral graft was harvested from the sixth rib (contra-lateral side) using submammary incision and was secured using three 2 mm titanium screws at the recipient site.

EP-MP 82
Aggressive osteoblastoma—a diagnostic dilemma

Manoj Kumar, Alavi Shiyas T

KMCT Dental College, Calicut, Kerala

Abstract
Osteoblastomas are benign neoplasms of bone. They are rare tumors accounting for only 1 % of all bone tumors. Aggressive osteoblastoma, is an extremely rare primary bone tumor of the maxillofacial skeleton. Dorfman and Weiss used the term aggressive osteoblastoma to the lesions which showed the presence of epithelioid osteoblasts, trabecular or sheet-like osteoid, and osteosclerotic resorption. They are locally aggressive, with a higher rate of recurrence but no tendency for distant metastasis. Aggressive osteoblastoma of jaw bones tends to be large and are predominantly seen in mandible and usually occur in older patients. Case report-A 60 year old lady reported to our department with a swelling on right side of the face. The swelling was noticed one 1 year ago. Excision was done twice from another center but it reappeared.A CTscan with 3D reconstruction was done which showed an expansile lesion involving the right body of mandible. Laboratory investigations were done to analyze serum calcium and alkaline phosphatase levels. An elevated serum alkaline phosphatase level was noted, which is often considered as a marker of local recurrence. An incisional biopsy was done from our centre which confirmed the diagnosis of aggressive osteoblastoma. Segmental resection was performed with a margin of 1 cm on eitherside. The defect was reconstructed with iliac crest graft. Three months afterwards the lesion reappeared, showing signs of recurrence.
Conclusion
Aggressive behavior of this lesion warrants thorough clinical, laboratory and radiographic evaluation. Histopathologic distinction from low grade osteosarcoma is often very difficult.

EP-MP 83
Diagnosing liver clots—a rare postsurgical hemorrhagic complication—a case report on chronic myeloid leukemia

K. Sankar, Anegh

Mahatma Gandhi Post Graduate Institute of Dental Sciences

Abstract
Background
Bleeding is a common sequela of periodontal and oral surgery. Generally, bleeding is self-limiting. Special circumstances require additional procedures to reduce or eliminate active hemorrhage. Occasionally hemorrhage can be under control when a patient is dismissed from their surgical appointment and, subsequently, the patient will experience either slow seepage of blood or extravascular clot formation.
Objective
The likelihood of delayed or abnormal clots post surgically may be attributed to many factors, like infection, intrinsic trauma, presence of foreign bodies that may cause repeated, delayed organization of blood coagulum. However, there may at times lie a deeper, much serious complication lurking behind. This poster presents a case report on chronic myeloid leukemia diagnosed from a liver clot.
Methodology
A patient reported several days after extraction with a complaint of inability to occlude due to presence of some foreign material at the surgical site associated with minimal pain and mild bleeding. Clinical examination revealed formation of a "liver clot" or "currant jelly clot".
Results
The clotting cascade and common laboratory tests to evaluate bleeding disorders led to a confirmatory diagnosis of chronic myeloid leukemia.
Conclusion
Post surgical hemorrhagic complications must be taken seriously and all factors must be evaluated. Sometimes, serious complications such as chronic myeloid leukemia may also be diagnosed by an oral surgeon and an early and accurate diagnosis will play a major role for the patient.

EP-MP 84
Keratocystic odontognic tumor: a case report

S. P. S. Sodhi, Jatinder Bhardwaj

Dasmesh Institute of Research & Dental Sciences, Faridkot

Abstract
KCOT is one of the most aggressive odontogenic cysts with a high recurrence rate, this was explained histopathologically as it typically shows a thin, friable wall, which is often difficult to enucleate from the bone in one piece, and have small satellite cysts within the fibrous wall. It can become quite large because of its ability for significant expansion, extension into adjacent tissues and rapid growth and also has high reoccurence rate as it shows a thin, friable wall, which is often difficult to enucleate from the bone in toto, and have small satellite cysts within the fibrous wall. Management of the keratocystic odontogenic tumor has been one of the most controversial entities of the maxillofacial surgery. Multiple surgical approaches were introduced including decompression, marsupilization, enucleation with or without adjunct (Carnoys solution, enucleation) and resection. In this we present a case of 36 years old female patient diagnosed for KCOT w.r.t left mandibular body region. In which enucleation was done with an adjunct.

EP-MP 85
Adenomatoid odontogenic tumor-a case report

P. Bal Reddy, Sridhar Reddy

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Abstract
Adenomatoid odontogenic tumor (AOT) is a rare tumor of epithelial origin, comprising 3 % of all the odontogenic tumors. It is a benign, painless, non invasive, and slow-growing lesion, with a relative frequency of 2.2–13 % and often misdiagnosed as an odontogenic cyst

on clinical examination. AOT affects young individuals with a female predominance, occurs mainly in the second decade, and usually surrounds the crown of unerupted teeth. This lesion is most commonly located in the anterior maxilla and rarely in the mandible. It is usually associated with an impacted canine. AOT frequently resembles lesions like dentigerous cyst or ameloblastoma. AOT has three variants, follicular, extrafollicular, and peripheral. The intraoral periapical radiograph is the best radiograph to show radiopacities in AOT as discrete foci having a flocculent pattern within radiolucency even with minimal calcified deposits. These calcified deposits are seen in approximately 78 % of the lesions. Herewith, we present the report of an unusual case of AOT located in the mandible, with an emphasis on radiographic findings and on treatment plan, and on reviewing the existing literature on this tumor.

EP-MP 86
Osteomyelitis of the condyle: a case report

Rahul P Menon

Army Dental Centre (R&R)

Abstract

Background

A 42 yr old, well controlled diabetic, reported to this department with clinical features of trismus and draining sinus in the left pre auricular region since 3 months. With a history of uneventful extraction of 28, he subsequently developed pustule in the left pre auricular region with purulent discharge. There was no history of ENT infection/ trauma, he was provisionally diagnosed as a case of acute suppurative parotitis.

Investigations

USG confirmed the localization. CEMRI revealed an inflammation of the left lateral pterygoid and TMJ with fluid accumulation in the vicinity of the TMJ, not involving the parotid gland. NCCT revealed osteolytic changes of the lateral surface of the condyle and ramus with dilated marrow space and pathological left sub condylar fracture.

Treatment

The individual was taken up for aggressive curettage and debridement with fistulectomy under GA with the resection of the condyle.

Follow-up

The last 3 months have been uneventful with no residual neurological dysfunction or any signs of recurrence of the infection.

Conclusion

Given the involvement of the lateral pterygoid muscles, the TMJ and the erosion of the condyle and ramus without involving the parotid and lack of clear cut source of infection, anachoresis may be implicated in this case.

EP-MP 87
Syngnathia—a review of literature

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SCB Dental College, Cuttack

Abstract

Syngnathia refers to congenital fusion of maxilla and mandible. Complete bony fusion of the jaws, especially as an isolated occurrence is a very rare condition. The fusion can be bony fusion of maxilla and mandible (Synostosis) or a soft tissue fusion characterized by mucosal bands of tissue connecting various parts of the upper and lower jaws (Synechiae). Soft tissue fusion of the jaws are more common and well documented in the literature. The first case of bony syngnathia was reported by Burket in 1936. Since then a very few number of cases have been published in english literature. Several causes have been proposed for syngnathia like persistence of the buccopharyngeal membrane, vascular disruption due to local ischaemia at an early embryologic stage, early loss of neural crest cells etc. The rarity of this condition makes standardization of treatment difficult. Although several authors have reviewed this condition the description of cases is inadequate and inconsistent. The aim of this poster is to review the exsistent literature so that this condition might be better understood.

EP-MP 88
Cementifying fibroma

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Abstract

A Cementifying fibromas are rare fibro-osseous lesions that affect the jawbone and is considered to arise from undifferentiated cells of the periodontal ligament tissues that are capable of forming cementum, lamellar bone, and fibrous tissue. The lesions are more commonly seen in the 3rd to 4th decades of life with a predilection for female, ratio of female:male is 2 to 5:1. Mandible is most commonly involved. Current case is reported because of rarity of such lesions and the paucity of information concerning them in the dental literature. This poster depicts clinical, radiographic and histologic features associated with cementoossifying tumour. A 17 year old female Patient reported to the outpatient department with solitary, asymptomatic diffuse swelling in her right lower 3rd of face. On the basis of blood investigation, IOPA, OPG, CT scan and diagnostic possibilities, exploratory biopsy was done under LA and specimen sent for histopathological examination. According to exploratory biopsy the lesion was cementifying fibroma. We excised the whole lesion. The circumscribed nature of cementifying fibroma generally permits enucleation of the tumor easily. Prognosis is good, and recurrence is rare and there was no evidence of malignant transformation. Differentiation between the various fibro-osseous lesions i.e., fibrous dysplasia, ossifying fibroma and cementifying fibroma is difficult on the biopsy results alone. A review of the clinical and radiographic features together with the histopathologic changes and surgical findings will allow for a definitive diagnosis.

EP-MP 89
A case report—65 yr treated with OKC

Aarthi

Sree Balaji Dental College and Hospital

Abstract

It is one of the most aggressive odontogenic cysts of the oral cavity. OKC is known for its rapid growth and its tendency to invade the adjacent tissues including bone. Odontogenic keratocyst (OKC) is a cyst of tooth origin with an aggressive clinical behavior including a high recurrence rate.

Objective

Treating 65 yr old with OKC.

Methodlogy

Under GA, vestibular incision placed, flap raised, cyst exposed, enucleation done, cauterization done with carnoy's solution, debridement done, irrigation done. Wound closure done.

Result

Post operative radiographs taken, frequent review to be done.

EP-MP 90
Treatment options of central giant cell granuloma

Priyanka Gupta

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Abstract

Central giant cell lesions are benign intraosseous proliferative lesions that have considerable local aggressiveness. Conventional management is surgical and consists of enucleation and curettage. Despite this, a recurrence rate of 15–20 % is often quoted, and in these cases treatment may need to be more aggressive and may need to consist of an "en bloc" resection.Although the surgical procedures are effective, they have poor aesthetic and functional results when large resections are performed. Alternative medical treatments includes intralesional steroid injections, calcitonin injections, alpha interferon. Recently, bisphosphonates have been used to treat central giant cell lesions.

EP-MP 91
Trigeminal neuralgia -treatment modalities

Vishwaraj Nikam

M.A. Rangoonwala Dental College; Pune

Abstract

Trigeminal neuralgia is rare but characteristic pain syndrome. Most cases are still reffered as Idiopathic although many are associated with vascular compression. In this study we want to highlight about medical and surgical treatment of Trigeminal neuralgia. Most patients respond to drugs, Carbamazepine and Oxcarbazepine usually this is first line of treatment. If drug treatment fails or is not tolerated, surgical treatment are available.Available some treatments are associated with sensory loss, recurrence and some risk of mortality during surgery. We would like to highlight some of the recent advances in the management of Trigeminal neuralgia.

EP-MP 92
Multiple irritation fibroma: a case report

Pushkar Waknis, Shreyas S. Mohile

D. Y. Patil Dental College & Hospital, Pimpri, Pune

Abstract

Oral fibroma is a common benign scar-like reaction to persistent long-standing irritation in the mouth. It is also known as traumatic fibroma, focal fibrous hyperplasia, fibrous nodule or oral polyp. Oral fibroma presents as a firm smooth lump in the mouth. The surface may be ulcerated due to trauma, or become rough and scaly. This case report is a documentation of a 62 year old female. On examination 6 fibromas were present in relation to lower right and left buccal mucosa and floor of the mouth. It was managed by surgical excision under general anaesthesia and was closed with local buccal advancement flaps. Histopathology report showed multiple irritation fibroma. 1 year follow up showed no recurrence.

EP-MP 93
Management of central giant cell granuloma

Shiv Prasad

Sudha Rustagi College of Dental Science & Research, Faridabad

Abstract

Case Report

A 51 year old female patient came to department of oral and maxillo-facial Surgery with an intra oral swelling in left lower jaw having diffuse margin, non tender on palpation and on radiographic examination there was a radiolucent area with ill defined border also showing faint trabeculae between 34 & 35. Further incisional biopsy confirmed central giant cell granuloma. Patient was taken for surgical procedure under GA. Segmental resection was done and reconstruction plate was placed, there was no recurrence on regular follow up of six month.

EP-MP 94
Current management of vascular malformations and tumors

Jenifer J Marler & John B Mulliken, Manjusha Goswami

Bangalore Institute of Dental Sciences

Abstract

Vascular anomalies are rapidly evolving multidisciplinary field that combines several surgical & medical specialties. So there are current treatment modalities which deals with the management of vascular tumors & malformations.

EP-MP 95
Recurrent malignant hemangiopericytoma of the hard palate and attached gingiva in a 4 year old girl: a case report with review

Sudha Rustagi College of Dental Sciences and Research

Aby K Babu, Ashish Gupta

Abstract

Background

Hemangiopericytoma/ soliatry fibrous tumor is a very rare tumor of uncertain malignant potential. Under the WHO classification hemangiopericytoma and solitary fibrous tumors of the soft tissue are regarded as feature of the same entity in the soft tissue fascicle. Stout and Murray described these tumors as "vascular tumors arising from Zimmerman's pericytes". Head and neck lesions represent 16–25 % of all reported hemangiopericytomas, and they represent 2–3 % of all soft tissue sarcomas in humans.

Materials and Method
This poster reports an extremely rare case of hemangiopericytoma of hard palate and attached gingiva of upper and lower jaw which clinically appeared as pyogenic granuloma or drug induced gingival hyperplasia in a 4 year old girl.
Results
Recurrence after 6 months of wide local excision shows malignant nature of this neoplasm.
Conclusion
-Complete excision is essential to minimize tumor recurrence and radiotherapy may decrease the rate of recurrence in the case of incomplete resection.

EP-MP 96
A comparative analysis of odontogenic space infections in diabetic and nondiabetic patients: a prospective study

Neetu Aggarwal, Vikas Dhupar, Francis Akkara

Goa Dental College and Hospital Bambolim Goa

Abstract
Objectives
The present study aims to compare the odontogenic spaces involved, antibiotic susceptibility of microorganisms, length of hospital stay, and the influence of systemic co-morbidities on treatment outcome in diabetic patients.
Materials and Methods
A 2-year prospective study from January 2012 to January 2014 was conducted on patients with odontogenic maxillofacial space infections. The patients were divided into two groups based on their glycemic levels. The data were compiled and statistically analyzed using unpaired t-tests and chi square tests.
Results
A total of 188 patients were included in the study that underwent surgical incision and drainage, removal of infection source, specimen collection for culture-sensitivity, and evaluation of diabetic status. Sixty-one out of 188 patients were found to be diabetic. The submandibular space was the most commonly involved space, and the most prevalent microorganism was Klebsiella pneumoniae in diabetics and group D Streptococcus in the nondiabetic group.
Conclusion
The submandibular space was found to be the most commonly involved space, irrespective of glycemic control. Empiric antibiotic therapy with amoxicillin plus clavulanic acid combined with metronidazole with optimal glycemic control and surgical drainage of infection led to resolution of infection in diabetic as well as nondiabetic patients. The average length of hospital stay was found to be relatively longer in diabetic individuals.

EP-MP 97
Imaging evaluation of ameloblastoma and keratocystic odontogenic tumour: what the surgeon should know?

Santosh Kumar Agarwal

College of Dental Sciences, Davangere

Abstract
A wide range of benign and malignant lesions involve maxillamandibular regions, and they may be either odontogenic or non-odontogenic in origin. Ameloblastoma and Keratocystic Odontogenic Tumour are the most common benign odontogenic tumour involving the jaw bones. Although benign in nature, sometimes both tumours are aggressive and tend recur. Ameloblastoma requires extensive surgeries like resection and hemimandibulectomy or hemimaxillectomy unlike keratocystic odontogenic tumour which require more of conservative methods like marsupialization followed by enucleation or enucleation alone. So a prior pre-operative diagnosis of these two tumours is must to plan the surgical treatment. Various investigators have attempted to make differential diagnosis between these two tumours with the use of CT and MRI images. It has been found that there are certain imaging features which are distinguished to each of these lesions on CT and MR imaging. These characteristics imaging features contribute in the correct diagnosis of these two tumours. This can be used to differentiate between ameloblastoma and keratocystic odontogenic tumour and a precise pre-operative diagnostic tool to plan the surgery accordingly and decreasing the morbidity of patient by avoiding unwanted extensive surgeries in keratocystic odontogenic tumour unlike amelobalstoma.

EP-MP 98
Osteochondroma of mandible body—a rare case report

Eapen Thomas, Ravi Rajan

Pushpagiri College of Dental Sciences

Abstract
Osteochondroma, also known as osseocartilagenous exostosis is regarded as the most common benign tumour of bone, accounting for approximately one third of benign bony lesions. However, this process only rarely affects the craniofacial bones. Osteochondroma is not a true neoplasm but is thought to represent a developmental or hamartomatous process of bone. This lesion may present in a solitary fashion or as multiple osteochondroma as part of an inherited syndrome that results in disturbances of skeletal growth and development. In the craniofacial regions more than half of these appear in the coronoid process. It can also appear on the mandibular condyle, especially in its medial half, and mainly affects women. We present the case of a sixteen year old boy who complained of a firm, non-tender swelling on the left angle region. There were no associated temporomandibular joint (TMJ) complaints or associated pain. Computed tomography showed a bony proliferation on the left angle region. Excision of the lesion was done under general anaesthesia through a submandibular incision and was sent for biopsy which confirmed as osteochondroma. After a year follow-up the patient was symptom free.

EP-MP 99
Osteomyelitis of mandible

Eapen Thomas, Nipun Mohan

Pushpagiri College of Dental Sciences

Abstract
Osteomyelitis is the infection and inflammation of the bone or bone marrow. Osteomyelitis of the jaw is mainly caused by the spread of

adjacent odontogenic infection and the second most commonest cause is a traumatic fracture. The mandible is affected more commonly than maxilla due to variations in the histological aspect as well as in the blood supply. Osteomyelitis can be usually subclassified on the basis of causative organism, route, duration and anatomic location of the infection. It is usually a poly microbial opportunistic infection caused primarily by a mixture of alpha hemolytic streptococci and anaerobic bacteria from oral cavity. When the osteomyelitis of the jaw follows trauma, the likely cause is staphylococcus epidermis. The signs and symptoms of osteomyelitis include throbbing deep seated severe pain, swelling, edema, erythema, trismus, dysphagia, cervical lymphadenitis, paresthesia, fever, malaise, anorexia, leukocytosis, increased ESR and CRP, decayed or loosened teeth with pus discharge, sinus tracts or fistulas and fetid odor. Radiological examination often reveals a lytic center with ring of sclerosis. The management of osteomyelitis includes prolonged antibiotic therapy after culture and sensitivity of the wound site. Surgical debridement involving opening of the involucrum and removal of sequestrum or saucerization are needed some times. HBO therapy is a useful adjunct in the treatment of refractory osteomyelitis. Osteomyelitis is commonly seen in immunocompromised individuals. Here I am presenting a case report in which osteomyelitis was developed after extraction of a carious tooth in an otherwise healthy young adult.

EP-MP 100
Case report on central odontogenic fibroma

Udit Prakash, Moin Iftikhar Shapoo

Maharana Pratap College of Dentistry and Research Center

Abstract
Central odontogenic fibroma is considered to be derived from the mesenchymal tissue of dental origin, such as periodontal ligament, dental papilla, or dental follicle. It usually resembles an endodontic lesion and the most usual site of presentation in the mandible is the posterior area, while in the maxilla it is in the anterior region. This benign neoplasm is a rare tumor and accounts for 0.1 % of all odontogenic tumors. Central odontogenic fibroma radiologically presents both as unilocular and multilocular radiolucent lesion. Here we report an interesting case of central odontogenic fibroma in mandibular anterior region in a 45 yr old female. The patient was treated surgically under strict aseptic precautions. No post-operative complication was seen.

EP-MP 101
Basal cell carcinoma of the scalp treated by split thickness graft from thigh—a case report

Zahoor Ahmad Teli

Govt Dental College, Srinagar J&K

Abstract
Here I present a case of basal cell carcinoma of scalp in 40 yr old male patient, painter by profession, who was treated by surgical excision of the lesion followed by reconstruction with split thickness graft from thigh and is on follow up since one year.

EP-MP 102
Condylar hyperplasia

Prakhar Mongia

Government Dental College, Trivandrum

Abstract
Background
Facial aesthetics is an increasing concern in the modern population, facial asymmetry being one of the most prominent and common problems of all. Late onset Unilateral Condylar Hyperplasia is one such condition resulting in increasing corruption of a pleasing appearance of the patient.
Objective
The objective of this poster is to get an idea about the planning and management of condylar hyperplasia and giving the best treatment modality possible, for the welfare of the patient.
Methodology
Complete patient history was taken and thorough examination was done including deviation of chin, posterior open bite and midline shift, which were the main concerns for most of the patients. Appropriate treatment was given to the patient according to the age, continued growth, amount of growth etc.
Results
Condylectomy and orthognathic correction continue to be the most commonly used surgical modalities among most of the surgeons, giving promising results along with restoration of function and aesthetics.
Conclusion
With timely intervention and early correction of hyperplasia, proper form, function and aesthetics can be restored back with minimal or no deterioration of quality of life.

EP-MP 103
Radiolucency in anterior maxilla: a possible OKC?

Aaquib Hashmi

H. K. E. S. S. Nijalingappa Institute of Dental Sciences and Research

Abstract
Odontogenic keratocyst is a cyst of odontogenic origin, which accounts for the third most common cyst of jaw following radicular and dentigerous cyst. OKC is one of the most aggressive odontogenic cyst of jaw which is known for its rapid growth and high rate of recurrence. According to WHO reclassification, this cyst is considered as keratocystic odontogenic tumour (KCOT) because of its neoplastic nature. OKC has a bimodal age distribution with ages ranging from 20 to 30 and 50–60 years. It may occur in any part of the upper and lower jaw with the majority occurring in the angle and ramus of mandible. A very few cases have been reported of OKC involving the anterior maxilla crossing the midline. This poster presents a rare case of OKC in a patient aged 55 years involving anterior maxilla crossing the midline along with a systematic review of incidence of OKC cases involving maxilla published in literature.

EP-MP 104
CGCG—a case report

Mohammad Yasin Soudagar

Al-ameen Dental College and Hospital Bijapur

Abstract

Introduction

Central giant cell granuloma of the jaws (CGCG) tend to appear more often in children. In most of the studies, their true nature remains unknown and it has not been clarified if they are of reactive, inflammatory, infective or neoplastic origin. The clinical behavior of CGCG ranges from a slow-growing asymptomatic swelling to an aggressive lesion that presents pain, local bone destruction, root resorption and tooth displacement.Based on their biologic behaviour, ranging from an asymptomatic, or with minor symptoms, slowly growing bone swelling to an aggressive rapidly growing, painful, bone destructivelesion, CGCGS have been classified into non-aggressive and aggressive.

Objective

Therapeutic options have varied greatly over the years. Surgery is considered the traditional treatment and it is still the most accepted one, however in the literature not all authors agree on the type of surgery which should be performed.

Methodology

Surgical excision with curettage.

Conclusion

Resection provides the greatest certainty of a cure although morbidity is undoubtedly high. If soft tissues and periosteum are preserved, and only the bony component is excised, then it is possible to reconstruct the defect with bonegrafts. By doing this, bone continuity is maintained.

EP-MP 105
Surgical management of OSMF with diode laser

Sanjeev Kumar, Drvijay Mishra, Vidhi Rathi, Deepak Singh

ITS CDSR

Abstract

Oral submucous fibrosis {OSMF} has been well established in Indian medical literature. Pindborg (1966) defined oral submucous fibrosis as, "An insidious, chronic disease affecting any part of the oral cavity and sometimes the pharynx. Although occasionally preceded by and/or associated with vesicle formation, it is always associated with juxta-epithelial inflammatory reaction followed by fibroelastic change of the lamina propria, with epithelial atrophy leading to stiffness of the oral mucosa and causing trismus and inability to eat. Various treatment modalities are followed in treating this condition: in the initial stages of OSMF, medical management with intra-lesional injections of steroids, gamma interferon, hyaluronidase, placental extracts, triamcinolone and chymotrypsin have been tried with varying results. In the modern era, the use of laser to release fibrotic bands leads to healing with minimal scarring, thereby decreasing the probability of procedure induced trismus. Diode laser is a portable device which delivers rays through a fibre-optic cable and hence can be delivered to relatively "difficult-to-access" areas. Laser therapy eliminates the use of grafts, to close the defect in spite of extensive resection. In this study we evaluated cases of OSMF where diode laser was used to release fibrotic bands and its influence on maintaining adequate mouth opening which was evaluated pre operatively, immediate post operatively, at 10th day, 3 months and 6 months.

EP-MP 106
Surgical management of severe cases of OSMF—A review of various surgical procedures

Mohamed Jamsher

Kannur Dental College

Abstract

Oral sub mucous fibrosis is an insidious, chronic, disabling disease of obscure etiology that affects the entire oral cavity, sometimes the pharynx, and rarely the larynx. Surgical intervention is mostly indicated for stage III, moderate to severe disease,(MIO 15–25 mm); stage IVa, severe disease (MIO $<$ 15 mm); and stage IVb, extremely severe. This poster deals with the review of various surgical interventions done in OSMF ranging from coronoidectomy, artificial dermis, buccal fat pad, masticatory myotomy to the use of diode lasers.

EP-MP 107
Myasis—the story of a fly

Niyati Satish Balse; Shridhar Baliga; Sanjay Rao

VK Institute of Dental Sciences, KLE University

Abstract

The word "Myasis" is derived from the Greek word Myia which means "fly". It is the infestation of body tissues of animals by the larvae commonly known as maggots, of two winged flies, the Diptera. It is most frequently found in the tropical & sub- tropical countries where poor personal hygiene prevails. The Dipterous larvae invade the human or animal tissues, complete their life cycle fully or partly and feed onto the living or dead tissues. This condition in the orofacial region is a very rare entity commonly caused by common Indian House Fly Musca Nebulo. This poster presents a rare case of orofacial myasis in a clinically healthy male patient aged 53 years that was successfully managed and followed up in VK Institute of dental sciences, KLE university; Belgaum. The management consisted of careful removal of larvae one by one, application of anti- larval solution dressing and also the pharmacological management. A total of more than hundred larvae accounted for this condition and were retrieved over a period of few weeks. The poster throws light on the diagnosis, clinical & pharmacological management as well as the follow up of this case. It also highlights the ways and means to prevent this condition, its prevalence, the different pharmacological agents & their mode of action in management of this condition and the sequel of an untreated condition.

EP-MP 108
Osteomyelitis

Tejas Motiwale, Anuraag Subramanian

Sri Aurobindo College of Dentistry, Indore (M. P.)

Abstract
Osteomyelitis presents a variety of challenges to the Oral & Maxillofacial Surgeons. The severity of the disease is staged depending upon the infection's particular features including its etiology, pathogenesis, extent of bone involvement, duration and host factors particular to the individual patient. Osteomyelitis may be either hematogenous or caused by a contiguous spread of infection. A single pathogenic organism, Staphylococcus aureus, is almost always recovered from the bone in hematogenous osteomyelitis. Osteomyelitis is more commonly observed in the mandible because of its poor blood supply as compared to the maxilla and also because the dense mandibular cortical bone is more prone to damage and, therefore, to infection at the time of tooth extraction. The disease is completely curable and can lead to reversal of all destructive bony changes, if treated early with judicious use of antibiotics and surgical intervention (sequestrectomy). The primary weapons to treat these infections are culture-specific antibiotics, aggressive debridement, muscle flaps, and bone grafts. This poster offers a basic review of the etiology, pathogenesis, and treatment of osteomyelitis.

EP-MP 109
Ludwig's Angina: an emergency

Geeti V. Mitra, Manu Sharma

Sri Aurobindo College of Dentistry, Indore (M. P.)

Abstract
Ludwig's angina is a potentially life-threatening, rapidly expanding, diffuse inflammation of the submandibular and sublingual spaces which is generally of dental origin and if untreated the mortality rate is upto 100 %. Dental infection has been reported as a causative factor in 90 % of the cases and other factors include submandibular gland sialadentitis, compound mandibular fracture, oral soft tissue laceration, puncture wounds of the oral floor and secondary infection of oral malignancies. Ludwig's angina is rapidly progressing toxic cellulitis if not diagnosed in time and treated quickly. Early diagnosis of the incipient cases, maintenance of a patient airway, extraction of the affected teeth, intense and prolonged antibiotic therapy, hydration and early surgical drainage remains the standard protocol of treatment in advanced cases of Ludwig's angina. The literature suggests that the infection is caused by synergistic interaction between anaerobic and aerobic orgasims, therefore the role of emperical antibiotics and specific antibiotics targeting the microbes after culture and sensitivity is of prime importance. Here we are presenting poster a series of patients suffering from ludwig's angina who were treated adhering to the strict protocols with complete resolution of the condition.

EP-MP 110
Management of pleomorphic adenoma: a case report

Arun Bhati

Teerthanker Mahaveer Dental College and Research Centre, Moradabad

Abstract
Salivary glands are anatomical and functional adnexae of the oral cavity. The most common tumors of salivary glands is pleomorphic adenoma with a frequency between 54.1 & 65.6. Surgery is currently the appropriate therapy for the pleomorphic adenoma (Guntinas-Lichius et al., 2006). which is an option for superficially located adenomas. Controversy still remain in treatment. Benign lesions have been treated by superficial parotidectomy, malignant lesions have been subjected to total parotidectomy. However, total parotidectomy has the attendent major complication of total nerve paresis. We present a case of pleomorphic adenoma in parotid gland in middle age woman which have been treated with superficial parotidectomy with preservation of the facial nerve. No post operative complications observed in 4 months follow.

EP-MP 111
Central giant cell granuloma of the maxilla: variable presentation of two cases

Khuzema S. Fatehi

College of Dental Sciences, Davangere

Abstract
Background
Giant cell granuloma is a benign intraosseous lesion. The true nature of this lesion is controversial and remains unknown; the three competing theories are that it could be a reactive lesion, a developmental anomaly or a benign neoplasm. Furthermore, the actual etiology of CGCG is still unclear, although inflammation, hemorrhage and local trauma have all been suggested; it has also been hypothesized that CGCG may have a genetic etiology.
Objective
We hereby present 2 cases of central giant cell granuloma with variable presentation either clinically or radiographically.
Methodology
The first case clinically mimicked a pyogenic granuloma and the second case underwent a fine needle aspiration cytology which gave a nonspecific provisional diagnosis of inflamed dental cyst. The first patient underwent a computed tomography scan with the radiographical diagnosis given as sarcoma like lesion with mass destruction of maxilla. The second patient underwent dental OPG and maxillary occlusal views revealing mass destruction of the bone along with displacement of the roots of the maxillary incisor teeth. The first patient underwent segmental maxillectomy and subsequent reconstruction with a temporalis myofascial flap and the second patient underwent a cyst enucleation under general Anesthesia.
Results

Histopathological examination confirmed the diagnosis of CGCG in both the patients.

Conclusion

Central Giant Cell Granuloma may present with Variable presentations both clinically and radiographically. Hence accurate diagnosis with a subsequent well-formed treatment plan is an absolute necessity.

EP-MP 112
Facial space infection in infant: its really challenge to us

Mohd. Aqib Ansari, S. S. Ahmed, G. S. Hashmi, S. A. Rahman

Dental College A. M. U. Aligarh U. P.

Abstract

The diagnosis and treatment of fascial space infection is still an enigma for maxillofacial surgeon. Because of complexity and deep location of this region, the diagnosis and treatment in this area is difficult. The diagnosis of deep neck infection are difficult because of location of these spaces and usually covered by substantial amount of normal superficial soft tissue. The diagnosis and treatment becomes more challenging when it is related to infant. Surgical access to the deep neck spaces, the superficial tissue must be crossed with the risk of injury to neurovascular structure in the neck. Neural dysfunction, vascular erosion or thrombosis, and osteomyelitis are some of the complication of deep neck infection. We are presenting a case of fascial space infection of 6 months old infant with spread of infection into other deep spaces.

EP-MP 113
Osteoradionecrosis of the mandible-successful retreatment

M. Bhaskaran, S. Sukumar

Rajas Dental College and Hospital, Tirunelveli

Abstract

Background

Osteoradionecrosis (ORN) defines exposed irradiated bone, which fails to heal over a period of 3–6 months without evidence of residual or recurrent tumor. In the previous decades, a staging and treatment protocol suggested by Marx, has dominated the approach to ORN. However, recently this paradigm is shifting.

Objective

The purpose of this study was to evaluate our experience in managing ORN in different surgical approach in our centre.

Methodology

2 cases diagnosed as an ORN in our Department of OMFS. The staging of ORN was assessed as affected by tumor site, tumor stage and dose, chemotherapy, dental work, and time to diagnosis. The effectiveness of hyperbaric oxygen therapy (HBO) and surgery in the management of ORN was evaluated.

Results

ORN stage did not correlate with radiation dose. HBO therapy failed to prevent ORN progression. Surgical treatment was required for most stage 2 (partial resections and free tissue transfers) and stage 3 patients (mandibulectomies and free tissue transfers, including two flaps in one patient). At an average follow up of 26 months, all patients were cancer-free, and there was no evidence of ORN in those patients.

Conclusions

In early ORN, we advocate a conservative approach with local care, while reserving radical resections with robust reconstruction with vascularized free tissue for advanced.

EP-MP 114
Central Giant Cell Granuloma: an osseous enemy

Spencer Christopher McGhee

D. Y. Patil Dental College and Hospital, Pimpri, Pune

Abstract

Central giant cell granuloma is an intraosseous lesion constituting of cellular fibrous tissue that contain multiple foci of haemorrhage, multinucleated giant cells and trabeculae of woven bone.(CGCG) is a benign lesion of the jaws with an unknown etiology. Clinically and radiologically, a differentiation between aggressive and non-aggressive lesions can be made. The incidence in the general population is very low and patients are generally younger than 30 years. This lesion accounts for less than 7 % of all benign jaw tumors with female predilection. In this report, there is presentation of Central giant cell granuloma in the mandibular anterior region and to discuss differential diagnosis, radiographic presentation and management of this lesion. This lesion is found in patient with 60 years of age which is unusual. A 60 year old female reported with chief complaint of painless swelling in the anterior region of the mandible. Swelling was present since 20 years and gradually increased in size over last two years. Incisional biopsy was taken and lesion was confirmed as central giant cell granuloma. Treatment was planned as enucleationand surgical curettage under general anesthesia. Surgical curettage or, in aggressive lesions, resection, is the most common therapy. However, when using surgical curettage, undesirable damage to the jawis often unavoidable and recurrences are frequent. Therefore, alternative therapies such as injection of corticosteroids in the lesion or subcutaneous administration of calcitonin or interferon alpha are described in several case reports with variable success. Unfortunately, randomized clinical trials are very rare or nonexistent. Hence, we opted for the routine surgical treatment.

Conclusion

Though, there are different treatment modalities, one has to always assess the type of lesion, location and its aggressiveness and accordingly suitable treatment options should be selected and carried out.

EP-MP 115
Hemangioma of tongue obstructing airway—a rare case report

Preeti

Army College of Dental Sciences

Abstract

Hemangioma of the tongue is a rare lesion of the cranio-facial vascular anomaly. Decision making concerning the vascular anomaly is not established because there are complex classifications of diagnosis and many treatment options. Hemangiomas occur due to the failure of

complete involution of the fetal capillary bed resulting in the development of abnormal connections between arteries and veins (arteriovenous shunting). This results in progressive vascular engorgement, venous hypertension, expansion and destruction of tissue, producing obvious esthetic problems and, rarely, cardiac decompensation due to high output state. Hemangiomas are rapidly growing benign vascular tumors that often manifest in the neonatal period or during childhood, characterized by a slow rate of regression and incomplete involution.60 % of these tumors are located in the head and neck region, commonly involving the skin and frequently affecting the oral cavity. In this poster I will be presenting a case report of a 26 yr old male patient diagnosed with hemangioma in the left lateral surface of the tongue and was operated for the same.

EP-MP 116
Odontogenic myxoma

Gargi

Army College of Dental Sciences

Abstract
Odontogenic Myxoma is a rare and locally invasive benign neoplasms found exclusively in jaws. It commonly occurs in second and third decade and mandible more involved then maxilla. Lesion often grows without symptoms and presents as painless swelling. Radiographic features are variable.A case of odontogenic maxilla with unusual radiographic and histologic features described in 29 years old female. Histopathology showed loosely arranged spindle shaped stellate cells and few areas of odontogenic epithelium in mucoid intercellular substance.

EP-MP 117
A case report—calcifying epithelial odontogenic tumor

Vijay, Gangaprakash

Balaji Dental College and Hospital

Abstract
The calcifying epithelial odontogenic tumor is a rare benign odontogenic tumor that was first described by pinborg in 1955 lt accounts for less than 1 % of all odontogenic neoplasms.

EP-MP 118
Periapical radiolucency -a rare presentation

Sankar Vinod, Paul Steaphen

Mar Baselios Dental College, Kothamangalam

Abstract
A periapical radiolucent lesion in relation to upper anterior tooth with an unusual post operative diagnosis is presented here. The case was diagnosed as infected periapical cyst and underwent apicoectomy and cyst enucleation. The specimen was sent for HPE. Biopsy report came as odontogenic myxoma. This paper discusses odontogenic myxoma and stresses the importance of histopathological examination of all excised tissue.

EP-MP 119
Pleomorphic adenoma of parotid gland: a case report

Mohan D. Deshande, Snehal Ingole, Ankit Sharma

Nair Hospital Dental College

Abstract
Salivary gland tumours are rare, comprising less than 3 % of all neoplasia of head and neck region. Pleomorphic adenoma is the most common salivary gland tumour, accounts for 60–80 % of benign tumours of salivary glands. Usually they are found as solitary unilateral, firm and mobile, painless, slow growing mass. It consists of epithelial and mesenchymal components. Its morphologic complexity results from differentiation of tumor cells into fibrous, hyalinized, myxoid, chondroid and osseous areas. The diagnosis is made by the clinical and histo pathological examination. Untreated Pleomorphic adenoma can gradually enlarge in size and weigh several kilograms. Malignant transformation, though rare, has been reported. Management involves surgical resection by superficial or total parotidectomy.

EP-MP 120
Giant epulis of newborn

Haris Ali Bhat

Krishnadevaraya College of Dental Sciences

Abstract
Congenital epulis is a rare soft tissue lesion benign in nature, mostly occurs as single tumour but rarely as multiple in infants. Also known as Neuman's tumor, incidence rate is 0.0006 %. The histogenesis and natural clinical history of the lesion remains obscure. The tumor is present at birth and is located on maxillary or mandibular gingiva, most commonly in maxilla than mandible by a ratio of approximately 2:1. It is usually a pedunculated lesion found in the incisor region, apparently arising on the crest of alveolar ridge. It may vary considerably in size from few millimeters in diameter to several centimeters. The tumour often poses a challenge to respiration and feeding, hence its advisable to excise early. We present a case of a 5 day old newborn female baby, otherwise healthy, presented with a pedunclated mass protruding from the mouth orginating from upper right anterior alveolar ridge measuring 2 cm by 3 cm. Surgical resection of mass was done under GA and cautery was used for haemostasis.

EP-MP 121
Desmoplastic ameloblastoma of the mandible—a case report

Pushpendra Gaur, Harvey Thomas

NIMS Dental College, Nims University, Jaipur

Abstract
Desmoplastic ameloblastoma (DA) is an ameloblastic variant characterized by unique histologic and radiographic features. Histologically, ameloblastoma occurs in two main histologic variants: follicular and plexiform. The stroma of ameloblastoma usually consists of relatively acellular loose connective tissue. However, sometimes the stroma is more collagenous, and may be frankly desmoplastic with small nests and strands of odontogenic epithelium. This has been described as desmoplastic ameloblastoma (DA). Desmoplastic ameloblastoma usually does not present with radiographic or clinical features that are typical of other variants of ameloblastoma. The radiographic presentation is similar to that of many benign fibro-osseous lesions, so this variant should be considered in the differential diagnosis of patients who have tumors that resemble fibro-osseous tumors of the mandible and maxilla. The purpose of this poster is to present the case of a patient with DA and to discuss the treatment options and outcomes

EP-MP 122
Cryopreserved human amniotic membrane use in oral mucosal defects

R. S. Bedi, Shrikant Chakrawarti

Saraswati Dental College, Lucknow

Abstract
The amniotic membrane is a tissue of fetal origin. It is the innermost layer of the fetal membranes and comprises of a single layer of epithelial cells on a thicker basement membrane and a spongy collagen layer containing undifferentiated mesenchymal cells which differentiate into many kinds of mature cells, including adipocytes, osteocytes, chondrocytes, myocytes, cardiomyocytes, hepatocytes, neurocytes and vascular endothelial cells. AM is suitable for supporting the growth of epithelial progenitor cells. HAM serves as a basement membrane that facilitates epithelial cell migration, reinforces adhesion of basal epithelial cells, promotes epithelial differentiation and prevents epithelial apoptosis. Amniotic cells release physiological levels of cytokines relevant to wound healing, including platelet-derived growth factor, vascular endothelial growth factor, angiogenin, transforming growth factor beta 2 (TGF-2), tissue inhibitor of metalloproteinase 1 (TIMP-1) and TIMP-2. The amniotic membrane has been considered a suitable allograft for intraoral soft tissue reconstruction based on its low immunogenicity. So in this study we will use cryopreserved human amniotic membrane as an allograft material in intraoral mucosal defects.

EP-MP 123
Oral myiasis in rett syndrome: a case of parental negligence

Himanshu Chauhan

College of Dental Sciences, Davangere

Abstract
Background
Oral Myiasis is a rare disease caused by larvae of certain dipteran flies. It is mostly reported in developing countries and in the tropics. Low socioeconomic status, immunocompromised state, debilitated, unhygienic living conditions and senility are the main contributing factors responsible for myiasis. Rett syndrome is a neuro-developmenal disorder that affects girls almost exclusively. It is characterized by normal early growth and development followed by a slowing of development, loss of purposeful use of the hands, distinctive hand movements, slowed brain and head growth, problems with walking, seizures, and intellectual disability.
Objective
To understand the impact of parental negligence in the development of severe complications like Oral Myiasis in a syndromic child.
Methodology
A nine year old girl child reported to our department presenting with oral myiasis in anterior maxillary region. Following clinical examination patient was sent for CT scans which suggested the possibility of Rett syndrome. Her parents were informed about the condition and the treatment required.
Results
The clinical examination confirmed that it was a case of oral myiasis and the radiological examination done by the department of paediatrics confirmed it as a case of Rett syndrome.
Conclusion
The case is a clear cut example of parental negligence and abandonment as the patient was left in an orphanage owing to her abnormal physical appearance and mental condition leading to such complications.

EP-MP 124
Embolization in pediatric maxillofacial vascular tumour: a boon to surgeon

Pravin Chouhan

Government Dental College and Hospital, Nagpur

Abstract
Background
Maxillofacial tumour with vascular component in children are rare pathology. Surgical management of such lesion is very challenging in terms of bleeding control. Oral and maxillofacial surgeons are often involved in the treatment of these children, particularly if there is bony involvement, or an association with the dentition. Embolization is a well-established technique that facilitates the subsequent surgical removal of such tumours that reduces the bleeding and in acquiring clear surgical field.
Objective

To present the effectiveness and advantages of Embolization in increasing the ease of surgical management of these tumours.

Methodology

A prospective study of 3 cases.

Results

The results of all 4 cases are promising in terms of ease of surgery, intraoperative & postoperative bleeding.

Conclusion

Embolization is an essential and effective procedure for vascular lesion. This procedure induces a marked devascularization and necrosis of the tumor. Also provides useful perioperative visualization of the tumor in surgical field. It also helps in reduction/ shrinkage of vascular mass which provides complete removal of lesion.

EP-MP 125
Amniotic membrane in oral surgical defects

Seema Aggarwal

Punjab Government Dental College and Hospital, Amritsar

Abstract

Background

Surgical wounds in oral and maxillofacial surgery are prone not only to infection but also to contraction by scarring and often need a proper dressing or reconstructive material to prevent these complications. The amniotic membrane is a tissue of foetal origin. It is the innermost layer of the foetal membranes and comprises a single layer of epithelial cells on a thicker basement membrane and a spongy collagen layer containing mesenchymal cells. The amniotic membrane has been considered a suitable tissue for allograft based on its low immunogenicity. It also possesses anti-inflammatory, anti-fibrotic, and anti-angiogenic properties and also accelerates wound healing and epithelialization. Its easy availability and the comparatively low costs for preparation, storage, and use make it successful when compared with other graft. Recent studies have shown that it is abundant source of stem cells with ability to differentiate into chondroblast, osteoblast, adipocytes, myocytes and neural cells. These cells have the ability to differentiate into endothelial cells and also properties that are necessary to regulate angiogenic processes.

Conclusion

Therefore, amniotic membrane because of above mentioned characterstics can be used as a biological graft material in various postoperative surgical defects like vestibuloplasty, cystic lesions and various other oral surgical defects.

EP-MP 126
Conservative and aggressive management of kerato odontogenic tumor (odontogenic keratocyst)

Soumendra Kumar Parida, Senthil Murugan, K. K Raja

SRM Dental College, Ramapuram, Chennai

Abstract

Kerato odontogenic tumor synonymously termed as keratocyst is of odontogenic origin derived from the dental lamina. The treatment for OKC is still under debate due to its highest recurrent tendency. As the cystic lining is thin and friable, presence of satellite cysts, the concept of treating the lesion either conservatively or aggressively is controversial. With the advent of modern technologies and skillful operations, treatment of such lesions has become more advanced in preventing recurrences. This poster compares the two different methods of treating the disease.

EP-MP 127
Intra-Oral lipoma

Md.Awais Ahmed

Meghna Institute of Dental Sciences, Nizamabad

Abstract

A Case Report on Intra Oral Lipoma. Lipomas are the most common soft tissue mesenchymal neoplasms, with 15–20 % of cases involving the head and neck region and only 1–4 % affecting the oral cavity, the most common site is buccal mucosa region. We report a case of a female patient 38 years old with a painless swelling involving the lower vestibular region. The overlying mucosa appears to be normal. On palpation the lesion was non tender, movable, non compressible, non reducible, firm in consistency. Excisional biopsy was performed and the lesion was excised under local anesthesia.

EP-MP 128
Unusual presentation of hydatid cyst in masseter muscle-case report

Suresh Kumar, E. P. Buala Rani

Meghna Institute of Dental Sciences

Abstract

A Hydatid cyst or Echinococcosis is a zoonotic parasitic disease caused by tapeworm that occurs primarily in sheep grazing areas. Hydatid disease is most frequently caused by Echinococcosis granulosus and commonly affected organs are liver and lung. A high index of suspicion is required to diagnose it in the unusual region and non endemic areas. The disease is endemic in many mediterranean countries, the middle east and far east, south america, south and east africa. Liver and lungs are most commonly involved organs. The involvement of all the other organs including brain, heart, kidney, bone, skeletal muscle, breast comprise 10 % and listed under unusual localization. Incidence of hydatid cyst in head and neck region is extremely rare. Here I am presenting a rare case of 45 years old female with a slowly progressing non tender swelling in the right cheek of 1 month duration and it is not associated with pain or trismus. patient gave a history of close association with cattle.

EP-MP 129
Squamous cell carcinoma arising from lining of odontogenic cyst: a case report

Rahul Abhishek

J. S. S. Dental College & Hospital, Mysore, Karnataka

Abstract

A 40 year male patient reported with the complaint of pain and swelling in the lower right tooth back region since 15 days. O/E Diffuse swelling was noted over the left parasymphysis region from 33 to 47. A well defined unilocular radiolucency was noted. A histopathological examination revealed Keratocystic odontogenic tumour. Patient kept on follow-up for 6 months and after 6 months a fungating soft tissue mass was noted with respect to 48 region. Biopsy of the same reveals squamous cell carcinoma.

Summary

Squamous Cell Carcinoma arising from lining of different odontogenic cyst had been documented in literature. Less than 10 % cases arise from odontogenic keratocyst. One such case is being reported.

EP-MP 130
Lymphangioma of tongue—case report

Ravi Narula, Munish Kumar

Guru Nanak Dev Dental College, Sunam, Punjab

Abstract

Lymphangioma is a benign hamartomatous hyperplasia of lymphatic vessels. Majority of them are superficial, but a few may extend deeply into the connective tissue. Commonly located at head, neck extremities & genitals, they are rarely situated in the oral cavity. Intraoral lymphangioma occur more frequently on the dorsum of tongue, buccal mucosa, gingival and lips. Surgical excision is the treatment of choice. The prognosis is good for most patients. This case report discusses the clinical features, histopathological features & treatment of lymphangioma.

EP-MP 131
Large complex odontome of maxilla -a case report

Rohit Raj

Buddha Institute of Dental Science and Hospital

Abstract

Odontome are most common type of odontogenic tumor and generally they are asymptomatic and discovered during routine radiographs. These tumours are composed of enamel, dentin, cement and pulp tissue. The pathological conditions in which odontogenic differentiation is fully expressed are also known as odontomes. They are basically classified in two types—Compound and complex. Mostly compound odontomes are found in anterior maxilla whereas complex odontome are commonly found in posterior mandible. A 15 year old boy reported in our department with the complaint of swelling on the right upper jaw from 1 year. Extra oral examination revealed hard swelling present in the right maxillary posterior region having ill defined margins and was non tender on palpation. Intra oral examination revealed permanent dentition. Examination also revealed well defined hard swelling extending to alveolar region, swelling was non tender on palpation. Aspiration test was negative.Based on clinical features provisional diagnosis was given as odontogenic tumor. OPG radiograph showed ill defined radio plaque mass in right posterior maxillary region. This poster describes a rare case of complex odontome in posterior maxilla measuring 3 cm-3 cm-2 cm in diameter associated with impacted permanent maxillary molar with radiographic finding.

Treatment

Surgical excision of the lesion with extraction of two permanent maxillary molars involved in the lesion was performed and follow up was done for 4 month post operatively.

Result

Healing was uneventful without any complications both clinically and radiographically.

EP-MP 132
Rare presentation of radicular cyst: a case report

Ashino John, Eapen Thomas

Pushpagiri College of Dental Sciences

Abstract

Radicular cysts are the most common cyst of the jaws. They are caused by periapical infection or pulpal necrosis. It is usually associated with a non vital tooth. Usually a non surgical management is indicated for radicular cysts. Though if all the non surgical methods fail, it is indicated that surgical intervention may be done. Here is a case report of a misleading case of radicular cyst with destruction of almost half of mandible being successfully surgically intervened. Through this case more surgical options for managing changing pattern of radicular cyst presentation is put forward for research.

EP-MP 133
Osteomyelitis in maxilla: a case report

Sanjay Bhupendra Sharma

Rural Dental College, PIMS, Loni

Abstract

Osteomyelitis is an inflammatory disease of the bone that usually begins as an infection of the medullary cavity, rapidly involves the haversian system, and quickly extends to the periosteum of the area. It develops in the jaws after a chronic odontogenic infection or for a variety of other reasons such as trauma, inadequate treatment of fracture, or irradiation to the maxilla & mandible. Osteomyelitis of the jaws was a common complication of odontogenic infection (infections of the teeth). It can affect all ages, involve any bone, become a chronic disease and cause persistent morbidity. It may be classified as acute, subacute or chronic, depending on the clinical presentation. A patient reported in our department for complaining of pain & swelling in upper left posterior region of jaw. On Histopathological examination it revealed Osteomyleitis in maxilla.

EP-MP 134
Double closure of OAF by buccal fat pad & buccal advancement flap operation

S. P. S. Sodhi, Dikshit Behal

Dasmesh Institute of Research and Dental Sciences

Abstract

An oroantral fistula is an epithelialized, pathological, unnatural communication between these two cavities, which has its origin either from iatrogenic complications or from dental infections, osteomyelitis, radiation therapy or trauma. Various modalities for closure are in practice which exhibit both advantages and limitations. For wide posterior OAF Closure Buccal Flap Advancement Operation is suggested to be the best method. A case report of closure of OAF with respect to maxillary right first molar in a 35 year old male with occlusion of orifice by buccal fat pad and double closure of flap by buccal flap advancement operation was done which yielded satisfactory results.

EP-MP 135
Ameloblastoma

Abstract
Ameloblastoma, a.k.a,'Admantinoma of the jaw ' is a benign, locally aggressive type of tumour of epithelial origin. Around 80 % of the cases are reported in the mandible, with the 3rd molar region being the most common affected region. It is the second most common odontogenic tumour and account for upto 1/3rd of such cases. A slow growing painless tumour mostly seen in the 3rd to 5th decades of life. In the maxilla, most commonly affected area is in the premolar region may or may not be involving the maxillary sinus. It has high rate of recurrence and approximately 20 % of the cases are associated with dentigerous cysts or unerupted teeth. Radiographically it is seen as a multi-loculated, expansile 'soap-bubble' lesion with well demarcated borders. In MRI, ameloblastomas demonstrate a mixed solid and cystic pattern. Various treatment modalities in chemotherapy, radiation therapy, curettage, liquid nitrogen are available but the most definitive option remains to be surgical resection or ameloblastoma.

EP-MP 136
Non-syndromic hyperdontia: how much is too much?

Sarin Nizar

Abstract
Hyperdontia or the phenomenon of tooth tissue in excess of normal number has been associated with multiple syndromes. However, the presence of multiple supernumerary teeth in non-syndromic cases is a rare finding. These supernumerary teeth may remain impacted and asymptomatic or may occlude the path of eruption of various primary and permanent teeth. This paper discusses a case of non syndromic hyperdontia, with emphasis on clinical features and management.

EP-MP 137
Gorlin Goltz Syndrome: A case report

Abhigyan Manas

Abstract
Not many cases have been reported in India, and hence we report here a rare case of Gorlin Goltz syndrome (GGS) especially in young patients without any skin lesions. A 21 year old male reported to our department, with swelling in the lower posterior region of the right side of jaw since last 2 years. Thorough extraoral and intraoral examinations along with orthopantomogram (OPG), CT scan (skull) and chest radiograph helped in proper diagnosis of the condition. No skin lesion in the form of basal cell nevus, palmar or plantar pits, or keratosis were present. All the cystic lesions of the jaws were enucleated surgically and chemical cauterization done by Carnoy's solution. No sign of recurrence observed still date. Our case highlights the importance of the awareness of this rare syndrome, especially in young patients without any skin lesions because early verification of the disease prevent recurrence and better survival rates from the existent disease.

EP-MP 138
A Comparison of suppurative osteomyelitis, bisphosphonate induced osteonecrosis and osteoradionecrosis of the jaws

Neelam N. Andrade, Paul Mathai

Abstract
In the field of oral and maxillofacial surgery we come across 3 conditions that have necrotic bone in common: suppurative osteomyelitis, bisphosphonate induced osteonecrosis and osteoradionecrosis of the jaws. Each of these conditions have a distinct etiopathogenesis and require a different treatment approach. However, it is easy to get confused between these conditions due to similar clinical symptoms and radiographic findings. The purpose of this poster is to compare the clinical and histopathological findings and correlate them with the mechanisms and treatment approaches of each disease.

EP-MP 139
Odontogenic Myxoma—A Series of five cases

Neelam N. Andrade, Vikas Sandilya

Nair Hospital Dental College

Abstract
Odontogenic myxoma is an uncommon benign mesenchymal odontogenic tumor arising from the dental papilla, follicle, or the periodontal ligament. The evidence for its odontogenic origin arises from its almost exclusive location in the tooth bearing areas, its occasional association with missing or unerupted teeth and the presence of odontogenic epithelium. In 1947, Thoma and Goldman first described myxomas of the jaw bones. Since then odontogenic myxoma has been a subject of continuous scientific debate. Clinically, odontogenic myxoma is a benign painless, invasive, slowly enlarging mass causing marked asymmetry of the face. It commonly involves the mandibular premolar and molar regions. It causes expansion of bony cortices, displacement and loosening of teeth. In this paper, we present five cases of odontogenic myxomas which was operated in our department at NHDC followed by reconstruction of the surgical defect using various modalities such as free fibula graft and transport distraction.

EP-MP 140
Vascular anomalies of head and neck

Ankita Srivastava

Hitkarini Dental College and Hospital Jabalpur, MP

Abstract
Vascular anomalies are heterogenous group of congenital blood vessel disorder which can be subcategorized into vascular tumours and malformations. They are characterized by specific morphology, pathophysiology, clinical behaviour and management approach. They vary in location within the body. Arteriovenous malformation of head and neck is a rare anomaly but when present is persistent and progressive in nature and can represent a lethal benign disease. They present a therapeutic challenge because of their haemodynamic characteristics and modality of growth. So here I will be discussing treatment modalities for vascular lesions of head and neck.

EP-MP 141
Craniofacial fibrous dysplasia

Amoldeep Kaur, Tejinder Kaur, Sarika Kapila

Abstract
Fibrous dysplasias are non hereditary benign pathologies in which immature bone and fibrous stroma replace normal medullary bone as a result of abnormal differentiation of osteoblasts. These are mainly divided into two clinical types as monostotic and polyostotic FD and are accounted for 7 % of all the benign bone tumors and non tumor – like conditions. The most involved bone structures in the craniofacial region are maxillary and mandibular bones while involvement of frontal, sphenoid, and ethmoid bones is uncommon. It leads to compression and obstruction in the adjacent structres over time. Clinical symptoms such as blindness and deafness, nasal obstruction and ocular tension can develop. Surgery is controversial, ranging from conservative to radical. Serum alkaline phosphatse levels are significantly high in paients with FD. The results revealed that the level of postoperative serum ALP could be a reliable marker for predicting the progress of Cranifacial FD.

EP-MP 142
Uncommon presentation of cemento ossifying fibroma-a case report

Reena John, D. Venkata Krishnan

Vinayaka Mission Shankarachariyar Dental College

Abstract
Cemento-ossifying fibroma is a fibro-osseous lesion of the jaw. It is a slow growing lesion which if left untreated can attain large dimension.

Cemento-ossifying fibroma is a benign fibrous neoplasm that contains different types of calcified materials such as bone and cementum that occurs more frequently in women with reported male to female ratios ranging from 1: 1.6 to 1: 5.Both jawbones can be affected, although 62 % to 89 % of the lesions arise in the mandible, involving premolar and molar regions in 77 % of cases. They are mostly diagnosed between second and fourth decades of life. The lesion in this case can be considered as rare and atypical based on its anatomical location and gender occurrence.

A 62 year old male patient with diagnosis of cemento-ossifying fibroma involving the left maxilla is discussed in this presentation. The clinical, radiological, histopathological and immunohistochemistry features as well as the surgical management are discussed.

EP-MP 143
Culture sensitivity of pus in the odontogenic infections of the head and neck region

Gokkulakrishnan, G S Saketh

GITAM Dental College and Hospital

Abstract
This study was done to evaluate the predominant micro-organisms present in the pus of odontogenic infections of the head and neck region and also the culture sensitivity done to evaluate the efficient drug to which the microbial flora are sensitive. Thus the patient is benefitted by not having to use double medication before and again after culture tests and also decreasing the inflammation, infection and pain to the patient by the administration of drugs accurately. According to my study on 30 patients, the most common pathogen isolated was Klebsiella (43 %) followed by Proteus (26 %) and Pseudomonas (23 %). The micro-organisms were sensitive to Ciprofloxacin (63 %), Amikacin (46 %) and Moxifloxacin (30 %) while resistance was shown for Ampicillin (60 %), Cefpodoxime (56 %) and Amoxyclav (40 %). Thus we can infer that the odontogenic infections of the head and neck region can effectively and accurately treated using Ciprofloxacin and Amikacin as the drugs of choice.

Maxillofacial Trauma (CODE EP-MT)

EP-MT 1
Metabolic response to trauma

Debolina Pramanick

Guru Nanak Institute of Dental Science and Research

Abstract
Injuries or infections induce unique neuroendocrine and immunologic responses that differentiate injury metabolism from that of unstressed fasting. Here, we will deal with metabolic response to trauma/surgery. Generally, this complex response is harmonic and ordered resulting in the restoration of balance between hormones, electrolytes and nutritional status of the patient. The early post traumatic stress response is associated with a state of hyperinflammation, with increased oxygen consumption and energy expenditure. Though in the arena of oral and maxillofacial trauma may pose problem to enteral feeding a proactive concept of early enteral immunonutrition in severely injured patients is aimed at counterbalancing the negative aspects of hyperinflammation and hyper catabolism in order to reduce the risk of late complications including infections and post traumatic organ failure.

Recently, the concept of "ischemia/reperfusion" phenotype, the "leucocytic phenotype" and the "angiogenic phenotype" along with appropriately adapted "metabolic control" and "nutritional support" proposed by Aller and colleagues has become one of the most prime topics of discussion. This knowledge helps the surgeon to modify treatment plan in co-morbid patients as well as to plan the nutritional status of the patient.Based on these alterations, the surgeon can intervene earlier and make every effort to achieve a successful clinical result.

EP-MT 2
Midface fractures

Rakesh Ranjan

Institute of Dental Studies and Technologies

Abstract
Fractures of the middle portion of the facial skeleton are commonly referred to as midface or lefort fractures. While significant progress has been made in terms of evaluation and treatment of such fractures. With improved computed tomography scanning, the preoperative evaluation process has been significantly enhanced, whereas the evolution of improved surgical approaches and the introduction of rigid internal fixation in the form of plates and screws has facilitated repair. Rene lefort classified fractures of the midface as one, two and three based on three great lines of weakness that corresponds to the most common fracture sites. Lefort described midface fractures as bilateral in nature. Here we present a brief review of classification of midface fractures, biomechanics, evaluation and methods of repair.

EP-MT 3
Golden considerations in facial trauma with head injury for oral and maxillofacial surgeon

Anand D, Kavitha Prasad

M. S. Ramaiah Dental College and Hospital, Bengaluru

Abstract
Maxillofacial injuries comprise a substantial proportion of all trauma cases and road traffic accident is one of the main etiological factor. The cause of maxillofacial trauma varies widely in different regions of the world due to social, economical, cultural consequences. Maxillo facial fractures are often associated with blunt injuries to the cranium following high energy trauma. Maxillofacial trauma associated with traumatic brain injury carries significant risk for mortality and neurological morbidity. Facial injury should always be of clinical concern with associated brain damage, because it can be a marker for substantial transfer of energy to the brain. The common sequelae of these fractures are facial nerve paralysis, injury to the cochlear-vestibular apparatus, and cerebrospinal fluid (CSF) leakage. Fractures with CSF leakage and without significant displacement is treated conservatively. GCS is a good marker for determining brain injury, clinical conditions and prognosis of the trauma patient. In patients with closed head injuries, timing of surgery is of primary concern and they require multidisciplinary team approach of oral and maxillofacial surgeons and neurosurgeons. The timely intervention by the neurosurgeon and oral and maxillofacial surgeon plays a crucial role in the management of maxillofacial trauma patient with head injury and efficient cooperation between specialties facilitates rapid diagnosis and better management.

EP-MT 4
Utility of transmasseteric anteroparotid approach for ORIF in subcondylar fracture

Pushan Maity

Guru Nanak Institute of Dental Science and Reasearch

Abstract
The management of subcondylar fractures in adults remains controversial. Even with a consensus developing on the preference for open reduction and internal fixation of these fractures, surgeons are faced with the dilemma about an optimal approach to the ramus-condylar unit mainly due to the complex anatomy of the region, proximity to the facial nerve and parotid gland. The various approaches to the region have complications like limited access and injury to the facial nerve, chance of formation of parotid fistula and aesthetic problem. A relatively newer approach, the transmasseteric anteroparotid Approach, also known as Wilson's approach with three variations i.e cervicomastoid, retromandibular, rhytidectomy has produced satisfactory results with lesser complication, ease of access and Aesthetic results. In this poster we review the transmasseteric anteroparotid approach, its advantages over the other approaches especially the transparotid approaches in relation to ease of access to the Ramus-Condylar Unit, adequate exposure of the fracture site, time required for the procedure, postoperative complications and final aesthetic outcome.

EP-MT 5
Facial wound management

Madhumati Singh, Beena Roopak, Anita R Pal

Rajarajeshwari Dental College & Hospital, Bangalore

Abstract
Facial wounds are among the most frequently encountered injuries and they are unique because of their vascularity and healing potential. There are a number of ways a wound can be classified depending upon the nature of the injury, timing of injury, whether acute or chronic, depth of injury to the skin and underlying tissues. Wound healing can be achieved by a variety of alternatives to suturing which are staples, tissue clips, closure strips, topical adhesives. Often it is not easy to find simple direct instructions for the initial evaluation and care. Specialized techniques are necessary for injuries such as those of

the eyelids and facial fractures. In case of abrasions sterile bandages and dressings are enough but there are different ways to approach a clean and a contaminated wound respectively. In the usual facial injury, certain general principles should be followed. The main aim of this poster is to provide interventions that help in the effective management of the different types of wounds.

EP-MT 6
Bicoronal approach for midfacial fractures

Mehaboob Shaik, G. V. N.B. R. Sasthrulu

St. Joseph Dental College

Abstract
The surgical modalities and management of midface fractures has undergone an important and radical change in the past two decades. Various approaches implicated in the treatment of midface fractures. The bicoronal approach was popularised by Paul Tessier in sixties is one of the most versatile in treating midfacial fractures. Modern era surgeons have modified and improved the new craniofacial surgical techniques. The approach gives a broad exposure to the frontal bone, nasal bones, orbits, zygoma and zygomatic arch and gives an ideal aesthetic results. This poster highlights the treatment modalities of midface fractures with bicoronal approach in St. Joseph Dental College Eluru.

EP-MT 7
Coronal incision in maxillofacial trauma: an audit

Venkatesh Anehosur, K Gopalkrishnan, Abhijit Joshi, Nikhil. N, Mohit Bindal

SDM College of Dental Science and Hospital Dharwad

Abstract
Background
The bicoronal flap has been used by neurosurgeons to gain access to the anterior cranium for nearly a century. It was first described by Hartley and Kenyon in 1907. However, it gained widespread acceptance in maxillofacial surgery after 1970 s when Tessier and Henderson and Jackson reported the excellent access that it provided for LeFort II and III osteotomies.
Objective
Purpose of this poster is to highlight the experience, outcome and effectiveness of bicoronal approach for the treatment craniomaxillofacial injuries.
Methodology
A retroprospective study was conducted in our unit from 2010 to 2015 which included 35 patients with craniomaxillofacial injury. Patient were assessed for type of fracture, access to various anatomic structures via coronal incision and fixation method used. Patient were recalled to asses for hematoma, infection, scar perception, sensory motor deficit, alopecia and social impact.
Conclusion
The flap itself permits widespread exposure of the skull, and upper and lateral midfacial skeletons, with minimal morbidity. These factors, coupled with the aesthetic advantage of a scar hidden in the hairline, accounts for its continued popularity.

EP-MT 8
Rigid fixation implant in mandibular fracture: a case report

Iqbal Ali, R. K Srivastava, Puneet Wadhwani, Anand Shukla, Rehan Siddiqui

Career Postgraduate Institute of Dental Sciences and Hospital

Abstract
Lag screws are devices based on compression gliding principles that involves lagging one fracture fragments against another utilizing the screw head for the purpose of anchorage. The compression produced corresponds to the number of threads in the lag part. Principle indication of this technique being the oblique surfaces fractures of mandible, the following patient was managed with two lag screws being placed parallel to each other. Patient was followed up second day, one week, three week post operatively.

EP-MT 9
Management of condylar fractures using single L shaped plate: report of two cases

Vinod Kapoor, Parnika Kuthiala

Gian Sagar Dental College & Hospital, Rajpura

Abstract
In the entire spectrum of maxillofacial trauma, no other topic has created so much debate and controversies than mandibular condylar fractures. Although, there is still a controversy about the therapy for condylar fractures. There are two school of thoughts regarding the management of condylar fractures. According to some authors the use of a two plate fixation technique have the beneficial effect of restoring the tension and compression trajectories in condylar fractures but the insertion of many screws in a small condylar fragment is often difficult whereas other authors suggest that use of single L shaped plates are sufficient for stabilization of subcondylar fractures because of small size of subcondylar fragments. Two patients with bilateral condylar fractures presented to department of Oral and Maxillofacial Surgery were treated with open reduction and internal fixation using single L-shaped Ti plates on both the condyles and follow up for six months was done. It is found that the use of single plate also maintained the functional stability and the occlusion was satisfactory.

EP-MT 10
Transconjunctival approach for orbital floor and infraorbital rim fracture

Ranvijay

Buddha Institute of Dental Sciences and Hospital

Abstract
Purpose
To evaluate the transconjunctival preseptal approach for time required for exposure, adequacy of exposure, intraoperative and postoperative complications.

Materials and Methods
Materials for this study involved 5 cases of maxillofacial injuries with orbital floor and infraorbital rim fracture. The orbital fractures were accessed using a standard preseptal transconjunctival approach. The decision on the requirement of an additional lateral canthotomy was taken. Stabilization and fixation of the fracture were done using 1.5 mm orbital plates.
Results
The average exposure time taken for placement of incision till the exposure of the fracture was 21 min. Exposure obtained for fracture site was adequate in all cases, for the reduction of orbital floor and internal fixation of infraorbital rim. No cases had intraoperative and postoperative complications. In all cases postoperative esthetic outcome was satisfactory.
Conclusion
The transconjunctival approach is most effective surgical access to infraorbital rim and orbital floor and even to medial orbital wall. This approach is surgically similar in providing exposure and access, but aesthetically superior to other approaches and has minimal complications.

EP-MT 11
Open packing method for treatment of comminuted mandibular fractures

Mohammed Israr Ul Khaliq

GDC Srinagar

Abstract
Background
A new approach is introduced to treat comminuted mandibular fractures, whereby denuded bony pieces are re incorporated into the defect, these are then immobilized by open packing with idoform ribbon gauze.
Objective
The survival and fixation to underlying soft tissue are accomplished by open packing with idoform ribbon gauge in the severly comminuted fracture of a large mandibular segment incorporating the loss of lower teeth with a large avulsive wound intraorally.
Methods
A 2.5 cm wide ribbon gauge impregnated with iodoform paste was prepared by mixing 30 % iodoform powder with 70 % vaseline. Case 1-A 25 year old male reported with comminuted mandibular fracture in right side along with soft tissue defect. The major segment was stabalized with mini plates and intraoral defect was packed with iodoform ribbon gauze. Case 2—A 30 year old female reported with stage III Bisphosphonate related osteonecrosis of jaw (BRONJ) resulting in pathological fracture in left mandibular body.After excising extraoral sinus tract, intraoral extraction socket was curreted and packed and intraoral defect was packed with idoform ribbon gauze which was changed in 7–10 days regularly.
Results
The both patients had good clinical union after 45–50 days, X-rays showed good consolidation with realignment of bony pieces with no limitation in mandibular movements.
Conclusion
This antiseptic effect of iodoform is due to the slow release of elemental iodine when applied to the tissue which has mild disinfectant action with organic tissue. Iodine is also an irritant to tissue which promote granulation tissue formation.

EP-MT 12
The 3-dimensional locking titanium miniplate in management of mandibular fracture

Roshan T. Bagde, Sima Mazumdar

Terna Dental College & Hospital

Abstract
Fracture of the mandible occurs more frequently than any other fracture of the facial skeleton due to its prominent position. The modalities for the treatment of fracture of the mandible have been in a constant state of evolution. Plating system have evolved along with the time with respect to design and materials. Material of bone plates evolved from iron to stainless steel to titanium, vitallium and recently the bioresorbable polylactide. While material changed, so did the design from compression plate to rectangular plates, miniature plates, x-plates and more recently 3D locking plates and screw. "Three dimensional plate" stabilize the fracture segments rigidly by resisting the 3 dimensional forces namely shearing, bending and torsional forces occurring on the fracture site in function. In locking system, screw head and plate holes are threaded so as to "lock"with each other. The poster depicts the use of 3 dimensional locking miniplates in the management of mandibular fracture.

EP-MT 13
Lateral displaced condyle—a rare case

Chandan Sahana

Rafi Ahmed Dental College & Hospital

Abstract
Background
History of fall on from tree 5 months ago.
Objective
Treatment modality for longstanding rare case of laterally displaced condyle.
Methodology
Manual reduction under ga failed, condylectomy under ga.
Result
Occlusion & mouth opening normal.
Conclusion
This type of cases can not be treated with closed reduction only.

EP-MT 14
A Novel surgical approach for condylar fractures

Shruti Agrawal

V. S. Dental College & Hospital, Bangalore

Abstract
Traditionally condylar fractures were usually managed by conservative methods and therefore it needed attention when open reduction was indicated. Surgical repair of condylar fractures must follow three

rules- precise reduction, reliable fixation and minimal complication (intra and postop), to fulfil the principles of SEOA (safe, good exposure, easy surgical procedure, aesthetics). Medially displaced and low condylar fractures were treated with minor parotid anterior approach also called as a novel surgical approach, which resulted in less visible scar with no facial nerve injury and least manipulation time.

EP-MT 15
Choices of intubation in maxillofacial trauma

M. I. Parkar, Nilesh Mishra, Sanika G. Kulkarni

Krishna Institute of Medical Sciences

Abstract
Trauma is a major health problem of modern society. Maxillofacial trauma needs special attention as it is potentially life-threatening and has long morbidity for the patient. Maxillofacial injuries are the result of high-velocity trauma arising from road traffic accidents, sports injuries, falls and gunshot wounds. The first priority in the management of maxillofacial trauma is airway maintenance with cervical spine stabilisation and control of bleeding. Maintenance of patency of airway management in maxillofacial injuries presents with a unique set of problems. Single universal technique of intubation may not be favourable in all cases of maxillofacial trauma. Different types of injuries, time of surgery and type of surgery need different methods of intubation. Alternative techniques and appliances for airway management as per the requirement of surgery need to be considered. This poster describes various choices of intubation of the patient with maxillofacial trauma and how each stage contributes to comprehensive, safe and practical airway management of these patients.

EP-MT 16
A Systematic review of maxillofacial trauma scoring systems

Vaibhav Sahni

Maharishi Markandeshwar College of Dental Sciences & Research

Abstract
Background
Maxillofacial injury is a leading cause of hospital admission worldwide. An injury severity score for maxillofacial trauma would enable professionals to communicate effectively about the severity of injury, and allow for the uniform and standardized care of patients, being a prognostic tool.
Objective
In most models facial fractures tend to be classified according to anatomical regions but few papers seem to describe models that aim to address the full facial skeleton. It is the intended aim to study such models in light of measurement of the true severity of facial fractures.
Methodology
A systematic review of literature pertaining to trauma scoring systems for the maxillofacial region was conducted and analysed.
Results
The poster will display the analysis conducted and the concerned literature.
Conclusion
Measurement of true severity of facial fractures requires a score readily equipped to assess the complexity of facial fractures.

EP-MT 17
Traumatic eagle's syndrome following mandibular fracture

Elavenil, Vikrant Pratap Singh

SRM Dental College

Abstract
Background
Eagle's syndrome is caused due to elongation of styloid process. The symptoms occur due to the impingement of styloid process on the adjacent vital structures. Sometimes such elongated styloid can fracture inadvertently owing to trauma or sudden jerky movements and cause symptoms of Eagle's syndrome by impinging on adjacent structures which was otherwise normal. This poster presents the management of such fractured elongated styloid process and the controversies arising as whether to do a surgical or conservative management for styloid fracture.
Case Presentation
A female patient reported with the chief complaint of dysphagia and pain on turning the head towards the injured side following an assault.
Diagnosed
Mandible-styloid complex fracture.
Treatment Plan
Open reduction and internal fixation under GA for mandibular fracture. Conservative management for styloid fracture.
Treatment Done
Reduction and fixation of mandibular fractures using miniplates under GA. Soft diet and Muscle Relaxants were prescribed for styloid fracture.
Follow Up Period
3 months

EP-MT 18
Treatment of condylar fractures using trapeziodal condylar plates via rhytidectomy incision with transmasseteric anteroparotid approach

Anupama. P, Sujeeth Kumar Shetty, Vijay Singh Rai

JSS Dental College, Mysore, Karnataka

Abstract
The treatment of injuries to the temporomandibular joint (TMJ) is one of the most controversial topic in management facial trauma. Condyle is one of the commonest area of mandibular fracture. In terms of management, open surgical management is best surgical option for displaced condylar fractures. However, for moderately displaced condylar fractures, closed reduction with rigid or elastic maxillomandibular fixation is still frequently used. The decision to proceed with ORIF generates two inter-related controversial issues namely: type of fixation and choice of the surgical approach. In fixation methods a new method of osteosynthesis was done using Trapezoidal Condylar Plates (TCP) which was found to be an efficient osteosynthesis device for stabilizing subcondylar fractures. In bone plating, Rhytidectomy approach was employed which allows increased exposure with direct visualization for fixation of fractures in pericondylar region, provides

the least noticeable facial scar and minimal postoperative complications with Transmasseteric antero-parotid (TMAP) technique which offers swift access to the condylar neck while substantially reducing the risk to the facial nerve. A prospective study on 11 patients having condylar fractures was done using mentioned technique and plate. Patients were evaluated clinically and radiologically for surgical access, duration of surgery, anatomic reduction assessment with relevant radiographs. On the basis of results it is concluded that surgical treatment of the fractured, displaced condyle using the rhytidectomy incision with Transmasseteric antero- parotid (dissection) approach and anatomic reduction using Trapezoidal condylar plates were excellent.

EP-MT 19
Effectively dealing with the crisis of Myiasis: 2 case reports

Anupam Singh, Abhay T. Kamath, K. M. Cariappa

Manipal College of Dental Sciences, Manipal

Abstract
Oral myiasis is a rare condition that refers to the invasion of tissue of the oral cavity by fly larvae. It is an uncommonly seen condition in humans and is associated with poor oral hygiene, severe halitosis, necrotic tissues. Cases of oral myiasis have been reported in patients suffering from mouth breathing during sleep, mental handicap, cerebral palsy, epilepsy, anterior open bite, incompetent lips, and other debilitating conditions. This poster throws light on 2 cases of oral myiasis which were received in our department. The 1st case was of a patient with history of seizure disorders and chronic alcoholism, who suffered a trauma and was left unattended. The 2nd case was of a mentally challenged patient with a neglected, post-traumatic wound which was infested with maggots. In both the said cases the maggots were removed manually and the patients treated with oro-dental hygiene sessions, wound care, antibiotics and nutritional supplements. Etiology of this debilitating condition and the importance of oral health in special people are also hereby discussed.

EP-MT 20
Condylar fractures: defining treatment modalities

Kritika Rai

Faculty of Dental Sciences, M. S. Ramaiah University of Applied Sciences

Abstract
Mandibular fractures have a high incidence among the facial bone fractures. Fractures of the condyle account for 25 %-35 % of all mandibular fractures. Condylar fractures can be extracapsular, intracapsular, undisplaced, displaced, deviated, or dislocated. The treatment method for these fractures is determined taking into consideration the age of the patient, level of the fracture, whether the fracture is unilateral or bilateral, the degree of fracture displacement and dislocation, the coexistence of other fractures, complication risk and the occlusion of the patient. Treatment of condylar fractures has generated a great deal of controversy. This is due to the anatomic complexity of the condyle, its contribution to the TMJ and its extensive attachments. In the past, the closed reduction of mandibular condyle fractures has been the preferred approach to treatment. However, in recent years, open treatment with rigid internal fixation has become more common. This poster aims to evaluate the main factors that determine the choice of an open or a closed method for treatment of condylar fractures, to identify the significant differences in their clinical outcomes and to support or refute the superiority of one method over the other.

EP-MT 21
The flying bird incision in managing frontal sinus fractures

Mohan Baliga; Partho Shankar Chakraborty

Manipal College of Dental Sciences, Mangalore

Abstract
Frontal sinus fractures are becoming increasingly common in maxillofacial trauma in recent times. The optimal treatment for frontal sinus fractures remains a controversy. Multiple treatment option sand protocols have been put forward by multiple specialties over the passage of time, but we are still in search of that one optimal treatment approach. One such approach for management of these fractures can be via the Flying Bird incision approach. This presentation will aim to portray the importance of this approach in surgically fixing frontal sinus fractures along with classification of these fractures and a word on the Southampton protocol for surgical management of frontal sinus fractures. Long term follow-up is mandatory to avoid any post-operative complications.

EP-MT 22
Hemi-coronal approach for unilateral ZMC fracture—an assessment

S. Mohd, R. K. Singh, Divya Mehrotra, Hari Ram, Vibha Singh, Dichen Palmo Bhutia

King George's medical university, Lucknow

Abstract
Background
Zygomatic complex fracture accounts for 45 % of all mid-face and 13 % of all craniofacial fractures. adequate exposure of surgical field and adjacent stable articulation remains the critical factor in facial trauma management. Hemi-coronal incision provides single, hidden and safe incision which permits wide exposure of skull and upper midface and lateral skleton with minimum morbidity.
Aim
To evaluate the feasibility of hemi-coronal approach for treatment of ZMC fracture.
Material and Methods
10 patients with ZMC fracture with or without associated craniofacial fracture reporting to O. P.D. and trauma unit of OMFS dept. KGMU Lucknow. All patients were operated under G.A and postoperative clinical and radiographic assessment were done to access pain, swelling, improvement in diplopia, stability of fragments and assessment of facial nerve paresis and mouth opening were done.
Results
All cases reported immediate post operative swelling that resolved gradually. 2 cases had transient facial nerve paresis. adequate mouth opening an fracture stability was satisfactory in all cases.
Conclusion
Hemi-coronal approach for unilateral ZMC fracture was a single adequate incision that had minimal incisional scarring hidden in hairline. Therefore it was well accepted by patients.

EP-MT 23
Common approaches to facial trauma—an overview

Abhishek Bera

Haldia Institute of Dental Sciences and Research

Abstract
Background
We are sharing our experience of managing trauma in a rural belt in the south of Bengal. The proximity to the highway results in a high volume of poly trauma patients.
Objectives
The approaches to the facial skeleton are evaluated.
Methodology
Amongst the trauma patients, patients with fracture of the facial skeleton were selected. The approaches were evaluated for the following: 1. Ease of access 2. Morbidity 3. Cosmetic outcome 4. Surgical time.
Results
The fractures were primarily managed by intraoral approaches. The extraoral approaches were required in frontal bone, orbital cavity, condyle & ramus of mandible. Existing lacerations if any provide an easy access in such areas. The intra oral approaches are versatile and give wide exposure to facial skeleton. The bicoronal approach always provide an excellent access for Le forte III with naso-ethmoidal complex fracture but surgical time is a consideration. Retro mandibular approaches give good access for subcondylar fracture of mandible but the incidence of facial nerve paresis is high. Chances of ectropion are more in transconjunctival approaches and lateral canthotomy was necessary in most cases.
Conclusion
Among the wide array of incisions the intra oral approaches is versatile and associated with less morbidity. Extra oral approaches are difficult to master but are necessary in certain areas of facial skeleton.

EP-MT 24
Management of mandibular body fractures in pediatric patient—a case report

Waikhom Arvind

Sree Balaji Dental College and Hospital

Abstract
The treatment of pediatric maxillofacial fractures is unique due to the psychological, physiological, developmental, and anatomical characteristics of children. The treatment plan in children has to be modified as compared to adults considering the presence of tooth buds and potential disturbances in growth. Use of acrylic splints has been one of the popular techniques in children because of its relatively easy placement and reduced risk of hindrances to growth of jaw. Reduction and immobilization is done with acrylic splint and circum-mandibular wiring.
Background
When determining the optimal treatment for a pediatric mandible fracture, planning must factor in the patient's age, anatomy, stage of dental development, fracture site, and ability to cooperate with the proposed treatment plan. Careful consideration must be given to the possibility of long term growth disturbances secondary to various fracture location and types of treatment. As such, the management of a pediatric mandible fracture is substantially different from that of the adult injury.
Objective
Minimal invasive and safe procedure for pediatric patient.
Methodology
Reduction of pediatric mandible to normal form and function using acrylic splint and circum-mandibular wiring.
Conclusion
The use of occlusal splint in stabilising the fractured segment of the pediatric dental arches is the most common treatment modality. As the anatomical occlusal relation can be achieved without injuring any developing tooth bud nor injuring to the mucoperiosteum.

EP-MT 25
Management of NOE Fracture

Jayanti Prabha

Haldia Institute of Dental Sciences and Research

Abstract
Background
NOE complex is vulnerable to injury because of its prominent position at the junction of the upper and middle thirds of face. It is composed of four paired bones associated with soft tissue structures: 1. The lateral nasal bones 2. Frontal process of the maxilla 3. Ethmoidal bones 4. Lacrimal bones.
Objective
Untreated NOE fracture causes problems like peri-orbital ecchymosis, traumatic telecanthus, flattening of the alar bridge, sub-conjunctival haemorrhage, upturned nasal tip, and disturbed vision. Ultimate objective is to reposition the fragments into their anatomic position, good cosmetic results and most importantly create a âsafe sinus.
Methodology
Access by different incisions for example "H-shaped, W-shaped, Open sky, Gullwing, bicoronal incision etc. Both table of frontal sinus repairing was done. Avoidance of CSF rhinorrhoea by closing leakage if at all. Medial canthopexy, plating in dorsal root and frontal bone as required. Diagnosis is made by clinical findings and imaging (CT scan and PNS view).
Results
If successfully treated, results to obtain are—Improved contour in frontal sinus area, Elevation of dorsal root of nose, tip projection correction, Corrected MCL distance, Stoppage of CSF leak, improved vision. Overall improved facial appearance and aesthetics.
Conclusion
The complete knowledge of etiology, surgical anatomy with proper examination of patient and treatment planning will lead to better management. Although a difficult injury to repair but good results can be achieved by early intervention, wide exposure through aesthetic incisions, reconstruction, bone grafting and soft tissue corrections as required.

EP-MT 26
Alternative techniques of tracheal intubation—a breath for life

Apurva Jawdekar, Meena Vora

Y. M. T Dental College & Hospital

Abstract
Airway management are a set of medical procedures performed in order to prevent airway obstruction thus ensuring an open pathway

between patient's lungs and the external environment. Airway management for Maxillofacial trauma is often complicated by distortion of the airway from injury & other disorders. Airway management during surgery in patients with complex maxillofacial trauma has always been a challenge for the anesthetist, as the surgeon & anesthetist share the same limited space. In cases where there is necessity of intra operative restoration of dental occlusion by Intermaxillary Fixation, oral endotracheal tube becomes unfeasible. The presence of the tube in the field of surgery is often disturbing for the surgeon. Similarly nasotracheal intubation is contraindicated in naso-ethmoidal & other pan facial fractures. In the above scenario various alternative intubation techniques like Submental Intubation, Retrograde Intubation etc. have been suggested and followed. These alternative techniques of tracheal intubation help both the surgeon& anesthetist in delivering a better quality of patient care.

EP-MT 27
Emergency airway management in oral and maxillofacial surgery

Deepak Thakur, Kamta Sahu

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Abstract
Establishing a secure airway in a trauma, infection and tumour patients is one of the primary essentials of treatment. Any flaw in airway management may lead to grave morbidity and mortality. Maxillofacial trauma, cellulitis presents a complex problem with regard to the patient's airway. By definition, the injury compromises the patient's airway and it is, therefore, must be protected. In most cases, the patient undergoes surgery for maxillofacial trauma or for other, more severe, life-threatening injuries, and securing the airway is the first step in the introduction of general anaesthesia. In such patients, we anticipate difficult endotracheal intubation, tracheostomy, cricothyrodotomy and, often, also difficult mask ventilation. In addition, the patient is usually regarded as having a "full stomach" and has not been cleared of a C-spine injury, which may complicate airway management furthermore. The time available to accomplish the task is short and the patient's condition may deteriorate rapidly. Both decision-making and performance are impaired in such circumstances. In this review, we discuss the complexity of the situation and present a treatment approach.

EP-MT 28
Pediatric facial fractures

Sahana M. S

SDM College of Dental Sciences and Hospital, Dharwad

Abstract
During the last 25 years, there have been considerable advances in the prevention, diagnosis and management of Craniomaxillofacial injuries in children. When compared to adults, the pattern of fractures and frequency of associated injuries are similar, but the overall incidence is much lower. The overall incidence is around 71.9 %. This is a retrospective study from year 2010–2015 in the department of oral and maxillofacial surgey of SDM Dental College, Dharwad. Diagnosis is more difficult than in adults and fractures are easily overlooked. Clinical diagnosis is best confirmed by CT scans. Treatment is usually performed without delay and can be limited to observation or closed reduction in non-displaced or minimally displaced fractures. Operative management should involve minimal manipulation and may be modified by the stage of skeletal and dental development. Open reduction and rigid internal fixation is indicated for severely displaced fractures. Children require long term follow-up to monitor potential growth abnormalities.

EP-MT 29
Prevalance of mandibular fracture reported at our institute

Mukesh Kumar Kashyap

Rungta College of Dental Sciences and Research, Bhilai

Abstract
Fracture of the mandible occurs more frequently than any other fracture of facial skeleton. These fractures range in complexity from isolated injuries as a result of low velocity to comminuted or avulsive injuries paired with multisystem injury. Due to unique anatomy of mandible, several different modalities of treatment can be applied with similar success. The aim of this poster is to determine the etiology, frequency of mandible fracture among different age & sex, frequency of anatomic distribution and to report the different modalities of treatment provided to the patients at our institution.

EP-MT 30
Superior orbital fissure syndrome

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Abstract
The superior orbital fissure lies at the apex of the orbit, bounded medially by the lesser wing of the sphenoid, inferiorly and laterally by the greater wing of the sphenoid, and superiorly by the frontal bone. It serves as a pathway that allows communication between the orbit and the middle cranial fossa. The superior orbital fissure syndrome (SOFS) is a complex of impaired function of the cranial nerves, oculomotor, trochlear, and abducens nerves (III, IV, and VI), as well as the first three branches of the trigeminal nerve, the frontal, lacrimal, and nasociliary nerves that enter the orbit through the superior orbital fissure (SOF). Trauma, tumor, and inflammation are the three major precipitating factors for SOFS. Any unnatural narrowing of SOF due to trauma, direct bony compression of the contents of the SOF and/or a compression hematoma may cause the signs and symptoms of the syndrome which are either complete or partial depending upon the degree of compression of its related anatomical structure. This poster presentation aims to elaborate its etiology, signs and symptoms and current concepts of management.

EP-MT 31
Journey from trauma to ankylosis: a case report

Swati R Bharadwaj. Rashmi Patwa

D Y Patil Dental College and Hospital, Pune

Abstract

Background

Fractures of the zygomatic bone are extremely frequent in the midface region, and there have been numerous publications about the possible complications as well as the treatment of these injuries. However, the fracture of this bone with coronoid impingement is unusual & it is difficult to treat basically because of its importance, both functionally and esthetically.

Objectives and Methodology

A 27 year old male with a history of trauma to right Zygomatico-maxillary Complex 1 ½ year back, presented with a complaint of trismus and facial asymmetry since 1 year. On examination there was no mouth opening and facial asymmetry present. Maxillomandibular computed tomographic (CT) scan demonstrated an isolated right ZMC fracture impinging the coronoid of right mandible. The patient was managed by right coronoidectomy.

Result

Adequate intraoperative mouth opening was achieved. The patient is followed up for 3 ½ months and is disease free.

Conclusion

Though the incidence of zygomatic arch fractures with coronoid impingement is very rare, the immediate diagnosis and treatment is of utmost importance to avoid postoperative complications like diminished mouth opening, trismus and ankylosis.

EP-MT 32
Bilateral supero-lateral dislocation of mandibular condyle—a rare case report and literature review

Vikas Meshram, Manish Tiwari, Zeeshan Asar

Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital

Abstract

Dislocation of the temporomandibular joint (TMJ) represents 3 % of all reported dislocated joints. Traditionally, dislocation of the TMJ occurs when the mandibular condyle is displaced anterio-medially beyond the articular eminence. Traumatic dislocation of the condyle into the middle cranial fossa is well defined in literature, but posterior & lateral dislocation without condylar fracture is rarely described. Only 19 cases of such dislocation have been reported in the world English literature. This type of dislocation is often misdiagnosed or completely overlooked and hence inadequately addressed. This report documents a case of young male with the supero-lateral dislocation of intact mandibular condyle along with symphyseal fracture. We discuss the dynamics, diagnostic features and clinical management of such dislocations with the review of literature.

EP-MT 33
Chronic suppurative osteomyelitis—a complication following tooth extraction

L. Pallavi Chaitanya

CKS Theja Institute of Dental Sciences and Research

Abstract

Osteomyelitis was relatively common before the era of antibiotic therapy. Though now-a-days the prevalence of osteomyelitisis is decreasing, it still remains a challenging clinical entity. In recent times there is an increasing incidence of systemic diseases that compromise the host immunity such as diabetes mellitus, HIV infection etc. Osteomyelitis of facial bones is a rare condition. Maxillary osteomyelitis is rare compared to mandible osteomyelitis because extensive blood supply & strut like bone of the maxilla make it less prone to chronic infection. We report a rare case of Osteomyelitis involving whole of the Maxilla in a 50 year old male patient, diabetic and hypertensive for the past 5 years. He presented to us with an unhealed socket following dental extraction with offensive odour from the nose. Examination revealed a necrotic maxilla and hard palate on right side. Patient underwent complete surgical excision of the necrotic bone and saucerization. Because of poor diabetic control and postoperative care, oroantral fistula developed at later stage which is retreated. Results were satisfactory with appropriate antibiotics, strict diabetic control followed by closure of oroantral fistula

EP-MT 34
Two load sharing plates fixation in mandibular sub-condylar fractures

Shouvik Chaudhary

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Abstract

Purpose of study

Many surgeons favour open treatment of displaced condylar fractures, because reduction and rigid fixation allows good anatomical repositioning and immediate function. Mandibular condylar fractures have a high incidence but there is no consensus regarding the best choice of osteosynthesis. Different studies have high-lighted that the concept of stable osteosynthesis is correlated to the mechanical strains arising in the condylar region during mastication due to the action of the muscles acting on the mandible. We are sharing our surgical experience of possible use of double plate in treatment of sub condylar fracture.

Result

The tensile strain lines are mainly responsible for the complications concerning plate fracture or screw loosening that lead to the displacement of the reduced condylar fragment. For this reason, we used two plate and our surgical experience, supported by the results obtained from our study, suggests that the use of two plates in the

fixation of subcondylar fractures, leads to significantly greater primary stability, compared with the use of a single plate.

Conclusion

Use of two plates, correctly positioned for the fixation of subcondylar fracture fragments represents the best solution to obtain a stable osteosynthesis.

EP-MT 35
Airway management in maxillofacial trauma patients

Nageshwar Iyer, Chandandeep Singh

MMCDSR

Abstract

Airway management in maxillofacial injuries presents with a unique set of problems. Compromised airway is still a challenge to the surgeon and anesthesiologist in spite of all modalities available. Any flaw in airway management may lead to grave morbidity and mortality in prehospital or hospital settings and as well as for reconstruction of fractures subsequently. Airway obstruction from hemorrhage, tissue prolapse, foreign bodies, pieces of teeth or bone, ill-fitting oral appliances or edema may require emergent intervention for which multiple intubation techniques exist. Competing needs for both airway and surgical access create intraoperative conflicts during management of maxillofacial fractures. The requirements of the intended maxillofacial operation often preclude the use of an oral intubation tube and alternative methods for securing the airway should be considered before the start of the surgery. Both decision-making and performance are impaired in such circumstances. In order to improve the clinical outcome of patients with maxillofacial trauma, cooperation between maxillofacial surgeons, anesthesiologists, and trauma specialists are needed. The purpose of this presentation is to discuss the complexity and difficulties of securing the airway of patients with maxillofacial trauma and present our approach for airway management of such patients.

EP-MT 36
Cranioplasty

Smriti Ticku

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Abstract

"SYNDROME OF TREPHINED" Decompressive cranial defects following trauma: signature fracture of skull, iatrogenic craniotomy a developmental defect like frontal bossing is both aesthetically unacceptable to the patient. For which surgical recontouring of the skull bone by cranioplasty is of utmost importance. But, not only from the view point of cosmetics, also the repair of cranial defects gives relief to psychological drawbacks and increases the social performance. Cranioplasty following decompressive craniotomy is conceptually initive procedure from the perspective of safety and cosmoses. There are various grafts such as metal, non-metal types of allografts used for the reconstruction procedure. However, metallic bone substitute have largely been replaced by modern plastics. Researches in cranioplasty is now directed at improving the ability of the host to regenerate the bone. In spite of various cranioplasty materials which are been used little adjustments by the surgeon may still be required. Of utmost importance is the choice of the right material for the abnormal defect to gain maximum aesthetic outcome.

EP-MT 37
Blind After Trauma—What to Look For!!!!

Catherine S. Chandran, Saravanan Chandran, Karthik Ramakrishnan, Vivek Narayanan

SRM Kattankulathur Dental College

Abstract

I think we all suffer from acute blindness at times. Life is a constant journey of trying to open our eyes. Traumatic optic neuropathy (TON) is uncommon, yet a serious sequelae to facial injury. The American Medical Association equates total loss of vision in one eye to a 24 % impairment of a whole man. Literature from the late 90's state the occurrence of some 55 million eye injuries globally per day. Poor visual perception in 3 % of maxillofacial trauma cases was evident in Indian studies carried out in 2011. This has been attributed in most cases to TON resulting from indirect injury to the optic nerve. An increase in their incidence is being noted these days with the rise in the number of high speed Road Traffic Accidents. Clinical diagnosis of TON is made on the basis of a specific constellation of history and physical examination findings. Magnetic Resonance Imaging with its inherent superior soft -tissue contrast resolution has helped identify this problem early to a certain extent. However, the clinical situations characteristic of this type of injury makes diagnosis and early surgical intervention difficult. Its management is however controversial and data in literature does not show any one to be superior to the other. Here we present our experience with a case which fell into this much disputed category.

EP-MT 38
Bioresorbable plating system—a case report

Eapen Thomas, Tripti Nair

Pushpagiri College of Dental Sciences

Abstract

Rigid internal fixation of the jaw bones is a routine procedure in maxillofacial surgery and titanium plates and screws are regarded as the "gold standard". As the need for fixation is only temporary, at least until the bone has united, the removal of these plates after completion of the healing process has been advocated and although there does not appear to be a consensus in agreement for their removal this is routinely undertaken in some centers. Some of the additional disadvantages of these metallic materials relate to their extreme stiffness which it is suggested may cause stress shielding of the underlying bone. The potential shortcomings of metallic fixation devices used in maxillofacial surgery have led to the development of plates manufactured from bioresorbable materials e.g. polylactic acid, polyglycolic acid, and polydioxanone. The use of these biologically inert and resorbable plates for the fixation of facial bones in would appear to offer some clinical advantages over metal plates by eliminating the possible need for a second operation for their removal. One significant advantage of resorbable plating system in pediatric patients is avoidance of hinderance of growth of jaws and potential odontogenic injury. Here i present a case report of use of

bioresorbable plating system in rigid internal fixation of fractures of facial bones in a child who sustained injuries from trauma.

EP-MT 39
Mini-Retromandibular approach to condylar fractures

Md. Jawed Iqbal

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Abstract

Introduction

The treatment for condylar neck and subcondylar fractures remains one of the most controversial topics of mandible surgery despite the high incidence of these fractures. Treatment of subcondylar fractures can follow two different routes: conservative or surgical. Today, many surgeons prefer open reduction of displaced fractures, because such reduction and rigid fixation enables good anatomic repositioning and immediate function, compared with non-operative treatment, The treatment of condylar fractures by open reduction and rigid fixation creates more favorable results. The predominant surgical indication for adults is a dislocated or displaced condylar fracture outside the mandibular fossa, As it is generally impossible to attain anatomic reduction via conservative treatment.

Materials and methods

In 2015, 5 patients with 5 condylar fractures were treated surgically using the mini-retromandibular access. The mean operating time was 32 min (range 17–55 min). No facial nerve injuries. No parotitis were observed. All 5 patients achieve correct reduction and rigid fixation of the condyle.

Results

In all cases, good anatomical stump reduction was achieved. All the patients obtained good articular function, since the access was exclusively extra-articular.

Conclusions

Condylar fracture reduction, fixation and healing can be managed comfortably using a limited retromandibular approach. Moreover, the risk of facial nerve injury is limited as the nerve fibres are viewed directly.

EP-MT 40
Intubation in pan facial trauma: techniques

Soumithran C S, Manu Mathew

Govt. Dental College Calicut

Abstract

The airway management in patients with panfacial trauma requires a safe, secure airway and an uninterrupted surgical field. Many techniques are available in literature e.g. orotracheal intubation, nasotracheal intubation, sub mental intubation, tracheostomy, retromolar intubation, fibre-optic intubation. The necessity of intraoperative restoration of dental occlusion by intermaxillary fixation (IMF) makes the use of oral endotracheal intubation difficult. Each technique have their own limitations and advantages. Indications for intubation include inadequate oxygenation that is not corrected by supplemental oxygen, inadequate ventilation need for controlling and removing pulmonary secretions.Any patient in deep coma who cannot protect his airway or Any patient in imminent danger of upper airway obstruction needs intubation. Severe head and facial injuries with compromised airway or in patient in respiratory arrest needs immediate intubation. Submental Endotracheal Intubation has the advantages which include it allow simultaneous jaw and nasal surgery. Disadvantages include that it is a surgically invasive and extra procedure. There is risk of salivary fistula and submental infection. Fibre optic intubation is another technique which is used in panfacial fractures. Indications include history of difficult intubation, trauma to the airway, deep neck infections, tumors of the larynx or pharynx and need for neurological examination immediately following intubation. Advantages are excellent visualization of the airway with minimal hemodynamic stress when properly performed. Oral or nasal intubation is possible in the adequately prepared patient and has the ability to apply topical anesthesia and insufflate oxygen during intubation. Disadvantages include expensive and requires careful maintenance. Presence of blood/secretions impairs visualization and requires practiced expertise for use in acute situations

EP-MT 41
"Bottom-up outside"—for Panfacial Fractures

Giri, Sonu Rule

Sri Ramachandra Dental College and Hospital, Sri Ramachandra University

Abstract

The term "panfacial fracture" or complex fractures of the face is used when the upper, middle and lower facial thirds are fractured concurrently. Incidence varies from 10-15 % among maxillofacial fractures around the globe. It is usually accompanied by other systemic complications that impair the patient's life and therefore require primary treatment. Due to involvement of multiple bones of face it difficult to restore the original architecture of the face, often leading to secondary deformities, malocclusion, and reduced function. The goal of treatment of facial fracture is to restore both the functions and pre-injury 3-dimensional facial contours. Management of panfacial should ensure anatomical, esthetic, and functional repair of the face hence, restoring it to its original dimension. Among the many approaches, for the management of panfacial fractures are Bottom up and ouside in or Top down and inside out.

EP-MT 42
Condylar fractures—open versus closed reduction—a review

Syed Sharban Hussain

C. K. S. Theja Institute of Dental Sciences and Research

Abstract

Condylar fractures are not common but could lead to detrimental effects of growth disturbance of the mandible, Ankylosis of temporomandibular joint and facial asymmetry. It is commonly an associated fracture with fractures of body, symphysis or parasymphysis of the mandible due to transmission of forces following impacts on these sites. The basic principles of trauma surgery regarding open reduction and internal fixation of displaced fractures, open surgical management has been recognized to be best for fractures of the body

of the mandible. However for moderately displaced condylar fractures, closed reduction with rigid or elastic maxillomandibular fixation is still frequently selected. Aesthetics and restoration of function such as mouth opening and mastication are important considerations in management of these fractures. The aim of this review is to compare the operative and conservative management procedure that is open reduction internal fixation and closed reduction maxillomandibular fixation and clinical evaluation of displaced condylar fractures of the mandible.

EP-MT 43
Pediatric condylar fractures

C. Ravindran, Emmaneul, V. Arvind

Sri Ramachandra University

Abstract
The pattern of condylar fractures seen in children and adolescents varies with evolving skeletal anatomy and socio-environmental factors. The general principles of treating condylar fractures are the same in children and adults. Anatomic reduction is combined with stabilization adequate to maintain it until bone union has occurred. The location and degree of displacement of condylar fractures in children in primary and mixed dentition stage is not that useful variable for developing treatment plan. Rather the amount of interincisal opening dental age, occlusion and level of pain must be assessed carefully. If these are normal close observation and blenderized diet can be the treatment option. Nonoperative management (observation, exercises, maxillomandibular fixation, training elastics, bite opening splints) are overwhelmingly popular because there are minimal complications and outcomes are good with adults and children alike. Open reduction with internal fixation is rarely indicated for pediatric condylar or subcondylar fractures. With the advent of better investigative facilities like CT scan and 3D reconstruction, and newer airway management techniques with reliable anesthesia techniques and specifically introduction of mini and microplates open reduction and fixation of pediatric facial fractures is getting commoner.

EP-MT 44
Bridging broken nose

Bar Shaik Sheraz

MNR Dental College and Hospital

Abstract
Nasal bone- fractures are the most common types of facial fractures; however, they are often unrecognized and untreated at the time of injury. Its central position and anterior projection on the face predisposes the nose to traumatic injury. Studies have shown that most nasal fractures involve the septum, which can be an obstacle to successful reduction. Nasal bone Fractures can be classified as open or closed, depending on the integrity of the mucosa. Prompt identification and management of the injury in the early post injury period is imperative to avoid the potential complications of nasal and septal fractures condition due mainly to road accidents, sport injuries, physical confrontations, many broken noses are not promptly diagnosed and treated, leading to secondary nasal deformities and chronic obstructions. Careful physical examination guides the choice of treatment (open vs closed reduction), its timing, and the type of anesthesia required. Adequate follow-up is essential. Manipulation under local anesthesia is an effective first-line treatment for simple nasal fractures and should become a standard practice, but any associated septal injury can be responsible for postoperative nasal deformity and obstruction so other options may need to be considered like open or closed reduction and methods of immobilisation which are showcased with this poster.

EP-MT 45
Efficacy of 2 mm 3D locking titanium mini-plates in anterior mandibular fracture

Neelkamal Hallur, Aaisha Siddiqua, Syed Zakaullah, Ashwin Shah, Chaitanya Kothari, Shereen Fatima, Meenakshi Shah, Juhi Bendegere, D. Naved Khan

Al-badar Rural Dental College and Hospital Gulbarga, Karnataka

Abstract
Introduction
The geometry of 3D locking plates allows for an increased number of screws, stability in 3-dimensions, and resistance against torque forces.
Aim and objectives
This study was done to evaluate the efficacy of 2 mm 3D Titanium mini-plates in the management of anterior mandibular fractures.
Material and Method
Twenty patients with displaced, undisplaced fracture of anterior mandible underwent open reduction and internal fixation using 2 mm 3D titanium locking mini-plates and 2–10 mm locking screws. Study parameters included, were assessment of intra-operative stability of fracture segments after fixation and clinically for occlusion and healing. Radiographic healing at 1st, 6th and 12th week was assessed using Digora software.
Result
Postoperative clinical evaluation showed the occlusion to be satisfactory in all 20 patients. Radiographic healing of fracture was assessed in terms of bone density achieved on OPG and PA mandible using Digora software between 1st, 6th and 12th week and was found to be statistically significant. No case of wound dehiscence, plate/ screw fracture, screw loosening was observed.
Conclusion
The use of 2 mm 3D titanium locking plate has proved to be effective in the management of anterior mandibular fractures.

EP-MT 46
Use of 3D trapezoidal condylar plates in open reduction and internal fixation of subcondylar fracture

Neelkamal Hallur, Aaisha Siddiqua, Syed Zakaullah, Ashwin Shah, Chaitanya Kothari, Shereen Fatima, Meenakshi Kothari, Juhi Shabnam

Al-badar Rural Dental College and Hospital

Abstract
Introduction

Various implant devices have been used for open reduction and internal fixation of subcondylar fractures. Management of condylar fracture require plates that follows the principle of functionally stable osteo-synthesis and prevent the secondry displacement.

Aim & Objectives

Biomechanical evaluation of 3D trapezoidal plate with respect to functional stability and oseto-synthesis in displaced low sub condylar fracture.

Material and Methods

Ten patients with subcondylar fractures were operated with open reduction and internal fixation using trapezoidal plates. Pre-operatively, OPG and Reverse Towne's radiograph were taken. Post-operatively, radiograph's were repeated at 1st week, 6th week, 3rd month and 6th month and evaluated for healing and stability of the condylar segment. Patients were evaluated for pain, occlusion and mouth opening at 1st week, 6th week, 3rd month and 6th month.

Result

Patients post operative clinical evaluation showed the occlusion is satisfactory and mouth opening to be an average of 38 mm and none of the patients complained of pain in the follow up period. Radiographic healing of the fracture site was also found to be satisfactory.

Conclusion

The use of 3D trapezoidal plates has proved to be effective in management of subcondylar fractures.

EP-MT 47
Perplexing panfacial fractures: an enigma to the surgeons

Kundan Shah

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Abstract

Maxillofacial injuries constitute an integral part of polytrauma, the management of which varies from surgeon to surgeon. One of such injuries include Panfacial fractures, involving more than 3 bones of facial skeleton may present with disjunction or comminution of the bones, making the accurate reduction a challenging task to the maxillofacial surgeon. To approach to mandible first and move upwards (bottom -top) or to approach the midface first and move downwards (top -bottom) in the sequence of reduction and fixation of such fractures is a question which remained unanswered till date in the field of maxillofacial surgery. Few authors advocate bottom to top sequence while few others advocate the top to bottom sequence. From the cases being treated at our institution we found that both approaches have similar clinical outcomes. Hence it could be suggestive to start fixation of least disrupted (more stable) facial half as a guide for reconstruction of the remaining. This poster presents case reports of the cases treated with either of the sequences intending to compare the efficacy of each approach in achieving precise anatomical as well as functional outcome and to evaluate which sequence is amenable to the surgeons in obtaining appeasing results. However, further comparative studies with a larger sample size would be better to evaluate the final clinical outcome of individual techniques.

EP-MT 48
Coronal flap a workhorse in maxillofacial surgery: a retrospective study

Chinmay Rao, Samprati Badjate, Vrinda Kolte, S. R. Shenoi

VSPM Dental College and Research Center

Abstract

Background

The coronal approach has become a work horse for oral and maxillofacial surgeon since it has been put in use by Gruss et al. Through this approach surgeons can get excellent access practically to the entire facio-maxillary region including frontal bone, zygoma, zygomatic arch, supra-orbital rim, TMJ, subcondylar region, nasal bone & calvaria. The coronal flap has the advantage of good cosmetic results & hidden scar as compared to other incisions.

Objectives

This poster highlights the results of a retrospective study to verify multifaceted treatment outcomes over a period of 5 years.

Results

The results of this retrospective study are in keeping with the published literature with regards to vital parameters.

Conclusions

The results reiterate that the coronal approach for the treatment of midfacial fractures is truly the work horse in the arsenal of the maxillofacial surgeon.

EP-MT 49
Panfacial fractures

A. P. Mohan, Jeevan Kumar, Pavan Kumar, Viswanath

Kamineni Institute of Dental Sciences

Abstract

Background

Panfacial Surgeries are challenging individual treatment plan because of indulo due to high velocity accidents.

Objective

Re-establishment of proper vertical columns and anterofacial projection of skeletal face through anatomic reduction and fixation techniques.

Methodology

Various techniques are followed like rigid formation, anatomic reduction etc.

Results

Optimal results can be achieved when all the guidelines are followed.

Conclusion

The application of panfacial surgeries offers navel solutions for facial fractures.

EP-MT 50
Bioresorbable plates for facial fractures-A review of literature

S Mohan, Rince Mohammed

Government Dental College, Kottayam

Abstract
Proper approximation of fractures results in accurate anatomic reduction and restoration of normal occlusion and function. Titanium as well as stainless steel plates have been extensively used for fixing fractures.But however they require removal in circumstances like growing patients, infections, or on patient preferences. Resorbable plates and screws are relatively new in management of fractures of maxillofacial skeleton. They are usually made up of poly-L-lactic acid (PLLA) and 70 % poly-L-lactic acid/30 % poly-D, L-lactic acid (PLLA 70/PDLLA. They help to avoid problems associated with metal fixation such as growth disturbances and the need for a second operation to remove the plates and screws, interference with radiological evaluation stress shielding, and bone resorption. Biodegradable osteosynthesis system is a reliable alternative method for the fixation fractures especially for pediatric population. The purpose of this poster is to review on the advantages and disadvantages of resorbable plates for rigid craniomaiofacial fixations.

EP-MT 51
Post traumatic frontal bone reconstruction:a case series

S. Mohan, Sobitha. G

Government Dental College, Kottayam

Abstract
Fronal bone contour defects causes marked facial deformity, which is instantly obvious to the observer. The Aetiology Is usually post traumatic following road traffic accidents. The contour deformity of frontal bone was reconstructed using titanium mesh, mini plates and screws. In few cases bicoronal or hemicoronal approach was used, whilst using the scar of the previous laceration for access in the remainder. In some cases involving fracture of the posterior table of the frontal sinus combined neurosurgical intervention was required. The techniques used for reduction and reconstruction and the results obtained are presented.

EP-MT 52
Lag screws: principle and indications

Mahesh Chander and Tasveer Fathima, George Jacob

Sardar Patel Post Graduate Institute of Dental & Medical Science

Abstract
Background
The lag screw technique was first introduced to maxillofacial surgery by Brons and Boering in 1970 who cautioned that at least two screws are necessary to prevent rotational movement of the fragments in oblique fractures of the mandible. Lag screw osteosynthesis can be defined as the stable union of two bone fragments under pressure with the help of screw in lag fashion.
Objectives
The purpose of this poster is to put forward various indications, principle and advantages of lag screw as a type of rigid fixation over bone plate fixation.
Methodology
Works on the principle that the screw bisects the angle between the perpendiculars to the fracture line and the bone surface. Lag screw is indicated for surface oblique factures where the width of the fracture is greater than the height. Result With lag screw the main advantage is that MMF can be released immediately post operative and it allows early mobilization and functional loading of the fracture site by direct bone healing.
Conclusion
Lag screw can be applied more rapidly and rigidly securing the fragments with screws through a transoral approach and this also allows more anatomically accurate reduction over other rigid fixation methods.

EP-MT 53
Role of 3 Dimensional plate in the treatment of mandibular condylar fractures

Ritesh rajan, Abhinanad, Raghusai ram

SVS Institute of Dental Sciences

Abstract
Fractures of the mandibular condyle are some of the most common fractures of the mandible. According to Ellis et al Condylar fracture may account for 25 % to 35 % of all fractures of the mandible. But condylar fractures very rarely occur singly and are usually associated with fractures of mandibular parasymphysis, body, angle and even the contralateral condyle. In recent years, open treatment of condylar fractures has become more common, probably because of introduction of plate and screws fixation. In the last decade there has been considerable debate in literature on the choice of number and position of the plates in fixation of the condyle fractures. Many authors have advocated two plate fixation for better functional outcome. However the space constraints and limited accessibility to the fractured condyle led to the development of a new 3 dimensional single plate system for fixation of condyle fractures. This poster presents the role of a single 3 dimensional plate in the condylar fracture cases which were operated in our unit.

EP-MT 54
Methods of internal fixation in craniomaxillofacial region

Ritesh Sehgal

Peoples College of Dental Sciences and Research Centre

Abstract
Background
Internal fixation refers to the direct immbolization of fractured bones to enable or facilitate healing.
Objectives
To evaluate the merits and demerits of internal fixation in maxillofacial surgery.
Methodology
To review literature regarding direct internal fixation with regards to its history, evolution, present and future.

Results
On the basis of data analysed, merits and demerits of internal fixation throughout its utilised history will be discussed.
Conclusion
Internal fixation has been a boon in the management of maxillofacial trauma and pathology. It has played a vital role in achieving high standards in orthognathic surgery and reconstruction. Its evolution and history are a must know for maxillofacial surgeons if they desire to enhance the capabilities of this modality through research and development.

EP-MT 55
Open reduction & internal fixation of condyle & sub-condylar fracture—our experience

Pranay Pardeshi, Mukul Padhye, Geetanjali Mandlik

D. Y. Patil University, School of Dentistry

Abstract
Background
Management of mandibular condylar fractures remains a source of ongoing controversy in oral and maxillofacial trauma. In the past, closed reduction with concomitant active physical therapy conducted after intermaxillary fixation during the recovery period had been mainly used, but in recent years, open treatment of condylar fractures with rigid internal fixation has become more common.
Objective
The study was to analyze the treatment outcomes of condylar & sub-condylar fractures with open reduction & internal fixation with different mini-plates.
Methodology
A total of 50 dentate patients treated for condyle & sub-condyle fractures with open reduction & internal fixation at our institute were included in the study. Based on OPG, CT Scans & clinical diagnosis the patients were classified as: unilateral condylar fracture (12), bilateral condylar fracture (8), unilateral sub-condylar fracture (14) & bilateral sub-condylar (16). The patients were evaluated for occlusion, maintenance of fixation of anatomically reduced fractured bony segments, mouth opening, movements of the mandible, esthetic outcome, scar, mastication & complications. The patients were followed up on 1 week, 1, 3, 6, month & 1 year.
Results
Plate fracture was observed in 2 patients where only one plate was used for fixation. 1 patient was noted for facial nerve weakness & 1 patient reported with parotid fistula.
Conclusion
Adults suffering from condyle & sub-condylar fractures can efficiently be treated by ORIF, which provides good functional results.

EP-MT 56
Complications of ORIF of subcondylar fractures

Prachi Jobanputra, Swapna Nayan, Mukul Padhye

D Y Patil School of Dentistry, Navi Mumbai

Abstract
Aim
To study the complications of open reduction and internal fixation of subcondylar fractures.
Materials and methods
A prospective study was conducted on 50 patients with unilateral subcondylar fracture with occlusal disturbances who underwent open reduction and internal fixation of subcondylar fracture. This study was done to study the various complications and consequences of ORIF in subcondylar fractures treated extraorally. The complications included were deviation in mouth opening, open bite during occlusion, facial nerve injuries, frey's syndrome, parotid fistula, displacement of fracture segment, fracture of plates, ankylosis, avascular necrosis of condyle, scar, etc.
Results
Complications like deviation on opening of mouth, open bite during occlusion, transient facial nerve palsy, parotid fistula, Frey's syndrome, avascular necrosis of condyle were noted in 9 out of 50 patients. Complications like open bite and deviation can be corrected using post operatively, while patients with nerve injuries can be treated using multivitamin tablets.
Conclusion
Open reduction and internal fixation of subcondylar fractures can certainly prevent complications like shortening of the condyle, malunion of fractured segment, ankylosis which occur in closed reduction of subcondylar fractures but more complications are noted during open reduction surgeries. However most of these complications can be corrected using minor post operative corrective measures, using good surgical protocol and right case selection.

EP-MT 57
Management strategies for atypical fractures of mandible

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Abstract
Mandible is the only mobile bone of the facial skeleton which plays an important role in mastication, speech, and deglutition. Being a prominent bone of the facial skeleton, it is fractured most commonly among maxillofacial injuries. Mandibular fractures are the second most common facial fractures. Mandibular fractures occur twice as often as midfacial fractures, with the etiology ranging from inter personal violence to sports related incidents but most commonly, 75 % because of road traffic accidents. The energy required to fracture mandible is 44.6–74.4 kg/m^2, which is about the same as the zygoma. Fractures of mandible causes severe loss of function and disfigurement. The treatment plan depends upon the clinical presentation of the fracture and the biomechanics of the anatomic site. Extrapolation of principles of conventional mandibular fracture repair in such atypical clinical situations is needed to achieve a satisfactory outcome. The high force of impact associated with road traffic accidents atypical mandibular fractures are not uncommon to our practice. There is no standard treatment protocol for these fractures. Modification of the conventional treatment procedures is mandatory to treat atypical fractures. Finally the treatment plan depends upon the clinical presentation and biomechanics of the fracture site. My poster presents some atypical presentations of mandibular fractures and discusses the management strategy employed to treat these fractures resulting in favourable outcomes regarding ethetics and function.

EP-MT 58
Bear mauling and maxillofacial injury: a case report

I. B. Kar, Nirav Thakkar

SCB Dental College and Hospital

Abstract
Background
Bear bite injuries become a common occurrence in the forest region and patients presented with different patterns of injuries in maxillofacial region. Therefore, a common protocol cannot be established for management of this type of injuries. These animal usually attack in remote area where composite trauma centre do not exist and urgent referral of these patients will have significant effect on final outcome.
Objective
To address the injuries caused by bear mauling and treatment used at our institute for management of these types of injuries.
Methodology
A 60 year old male patient presented with maxillofacial injury caused by bear mauling to our institute. Patient presented with multiple lacerations over scalp, forehead, nose and soft tissue avulsion from right periorbital region and right ZMC fracture, NOE fracture and left Lefort 2 fracture. Primary management was done in the emergency department with debridement of wound and suturing with simultaneously managing patient general condition by maintaining airway, breathing and circulation. Definitive treatment was carried out at our department with exenteration of right eye, ORIF and reconstruction with radial forearm free flap for soft tissue loss over right periorbital region.
Result
The overall treatment was satisfactory from the surgeons and patients point of view.
Conclusion
Maxillofacial injuries due to bear mauling may require staged reconstruction though majority of cases can be treated with simple procedures. Selection of different reconstructive options and motivation for rehabilitation will provide better quality of life to bear mauling victims.

EP-MT 59
A decade of frontal bone fractures: Changing trends in its management—A Dharwad experience

Venkatesh Anehosur, Gopalkrishnan, Nikhil. N, Spoorti Shetty

SDM College of Dental Sciences and Hospital, Dharwad

Abstract
Background
Frontal bone fractures are usually associated with multiple maxillofacial injuries like Orbital, NOE, Le-fort fractures. The cardinal rule in the management of these injuries involve a multidisciplinary team approach consisting of a maxillofacial surgeon, neurosurgeon, ophthalmologist. To assess the treatment plan and decide the type of approach a thorough knowledge about the regional anatomy and need for reduction is required. The involvement of the nasofrontal duct and violation of the posterior table, and the presence of cerebrospinal fluid leak are of utmost importance because these are the morbidty relating factors.
Objective
The purpose of this study is to review the incidence, etiology and complications of frontal bone fractures and discuss the management principles followed in our unit (SDM craniofacial unit and research centre, Dharwad).
Methodology
30 patients with frontal bone fractures admitted to our unit from 2005 to 2015 and managed here are included in the study. They were treated accordingly based on the amount of displacement or communition of the anterior and/or posterior table, the integrity of the nasofrontal duct and neurologic status of the patient as determined by clinical and radiographic examination. Using the information obtained from the patient records, data like fracture pattern, treatment done, follow-up and complications, will be subjected to statistical analysis.

EP-MT 60
Surgical management of edentulous mandibular fracture

Nikhil, Adithi

SDM College of Dental Science and Hospital

Abstract
Background
The physical characteristics of the mandible are altered considerably following the loss of the teeth as there is decrease in the vascularity and the height of the mandible. In addition, the smaller cross sectional area of bone at the fracture site and the absence of the stabilising influence of teeth means that the bone ends can be displaced easily leading to forward and upward rotation of the posterior fragments and downward and backward rotation of the anterior fragment giving a bucket handle effect to the edentulous mandible.
Objectives
The effectiveness of open reduction and fixation of edentulous bilateral mandibular body fracture.
Methodology
The reduction and fixation techniques for treatment of fracture of edentulous mandible includes functional restoration of the mandible. Under most circumstances these fractures can be successfully treated with a closed reduction and splint fixation. In this present case of edentulous bilateral body fracture a surgical approach was considered. A visor flap was raised, open reduction and fixation using load bearing plate was done.
Conclusions
Management of edentulous mandible is always a challenge, and type of reduction is governed by the type of functional deficit, the amount of displacement of the bone fragment and the amount of bone stock remaining for reduction and fixation.

EP-MT 61
Post operative complications of infraorbital nerve following zygomatic fractures

Dhivya Sridhar

Sri Ramachandra University

Abstract
The aim of this study is to evaluate the neurosensory changes of the infra orbital nerve following zygomatic fracture and treatment by open reduction and internal fixation. Acute sensory disturbances on distribution of infraorbital nerve are present in zygomaticomaxillary

complex fractures and mid facial fractures. Dislocation of the fracture zygomatic complex may result in injury to or compression of the infraorbital nerve. Such an injury may cause hypoesthesia of the nerve. The test will be carried out using heat detection threshold, pin prick in the infraorbital nerve, supra orbital nerve region on the affected side as well as the normal side of the face. The test will be performed preoperatively and postoperatively. Post-operatively, the test will be carried out on the first day, seventh day, and after one month. Early treatment showed better results.

EP-MT 62
Adjunctive therapies in the treatment of osteomyelitis

Ashish Gulati

Babu Banarsi Das College of Dental Sciences

Abstract
Aim
Adjunctive Therapies in the treatment of Osteomyelitis.
Methodology
The current management for chronic osteomyelitis centers on adequate antibiotic coverage and surgical debridement of non viable tissue. The irrigation of osteomyelitis, however, often involves a prolonged and frustating course of management. Non surgical adjunctive modalities has not been widely used, mostly due to lack of percieved efficacy and have remained in a state of infancy.
Conclusion:
In this posture I will outline the rationale, current status and evidence for several potential adjuncts to osteomyelitis management.

EP-MT 63
Evolution of treatment of mandibular fractures

Gargi Madiwale

D. Y. Patil University, School of Dentistry

Abstract
Background
Mandible fractures are a frequent injury because of the mandible's prominence and relative lack of support. The most significant advancements related to the management of fractures of the mandible are based on specific technical refinements in the methods of internal fixation. Recent mandibular fracture management techniques have allowed for decreased infection rates and biological stable fixation of bone segments. This philosophy produces bony union and restoration of pre-injury occlusion and normally eliminates the need for wire maxilla mandibular immobilization. All this adds up to a faster, safer, more comfortable return to function.
Objective
To study the evolution of treatment of mandibular fractures.
Methodology
Extensive research was conducted for history of management of mandibular trauma and recent advances in this field.
Results
The treatment of mandibular fractures has been in a constant state of evolution over the past few decade. In spite of the presence of these modern techniques, closed reduction has by no means fallen by the wayside and still remains a commonly used procedure.
Conclusion
Treatment modality of mandibular fractures has been in evolution and more awareness needs to created for recent techniques.

EP-MT 64
Transmylohyoid route of endotracheal intubation: a better solution in cases of panfacial fractures

Venkatesh Anehosur, K. Gopalkrishnan, Nikhil Nagraj, Pravesh Kumar Singh

SDM College of Dental Sciences and Hospital Dharwad Karnataka

Abstract
Background
Transmylohyoid intubation was described by Gadre and Wenkis. Is an effective alternative to oral and nasal tracheal intubation or tracheotomy in the surgical management of selected patient with craniomaxillofacial injury. It has a low morbidity and it does not temped the surgical field, allowing for temporary maxillomandibular fixation intraoperative, and nasal assessment, manipulation and bone grafting either simultaneously or as an independent procedure.
Objective
This poster highlights on the frequency, indications, and outcomes of airway management by transmylohyoid intubation in maxillofacial trauma patients.
Methodology
A retrospective study was conducted in our craniofacial unit from 2010 to 2015 which included 30 patients with pan facial injury. Patients where assessed for type of fracture, complication occur during intraop and post op like superficial infection, abscess, damage to Lingual nerve, hypertrophic scar, orocutaneous fistula, mucocele.
Conclusion
Transmylohyoid intubation is an interesting alternative to tracheotomy, especially when short term post-operative control of airway is desirable with the presence of undisturbed access to oral as well as nasal airways and a good dental occlusion.

EP-MT 65
Open reduction v/s closed reduction in condylar fracture—an retrospective study

Manjiri Chakor

VSPM's Dental College and Research Centre

Abstract
Background
Condylar fractures are a unique subset of traumatic injuries to the maxillofacial skeleton. While these injuries must be managed according to the general principles of fracture management, there are a variety of special considerations that are peculiar to the condylar fracture. Apart from restoring the function and aesthetics additional consideration are aimed towards treatment, as condyle functions as a moving unit within the temporomandibular joint and the fact that it serves as a mandibular growth center. Thus management of condylar fracture remains the source of ongoing controversy. Crucial question is whether precise alignment of segments is necessary to provide the best functional results. While it appears that many condylar fractures can be managed non-surgically, recognition of the cases that required

surgical intervention and selecting an appropriate procedure are paramount to success in treating these injuries.

Objective

To study retrospectively efficiency of Open Reduction v/s Closed Reduction for management of condylar fractures.

Methodology

A randomized, retrospective, single blind study is being carried in the Department of OMFS and variables (trismus, deviation of midline, and occlusion) are being compared in patients of condylar fractures treated by Open and Closed Reduction.

Results

Study is under progress and results awaited.

EP-MT 66
Management of human bite injury in oral & maxillofacial surgery

Mohan Naik, Vikas Dhupar, Francis Akkara

Goa Dental College and Hospital

Abstract

Bite injuries tend to be among the most typical forms of trauma to which human is exposed. Contamination is actually the most frequent problem in bite injuries. The surgical approach regarding facial bite injuries continues to be debatable. The controversy persists in the ideal time to do the wound debridement together with initial wound suturing as well as the use of antibiotics prophylaxis. On the contrary, human attacks are likely to be unnoticed with regard to making an evaluation within any casualty room. They can be especially notorious owing to the polymicrobial character associated with human saliva inoculated within the injury as well as the threat they will present with for transmission of contagious health conditions. Prompt treatment plan, most appropriately prophylaxis in addition to precise evaluation is definitely critical for achieving desired results. This poster presents case reports illustrating the management protocol of human bite injuries.

EP-MT 67
Post traumatic trismus in zygomatic complex fractures

Kalangi Raja Harsha and Sailesh Kumar. R

Meenakshi ammal Dental College and Hospital

Abstract

Background

Trismus is commonly associated with zygomatic complex fracture and this is mainly attributed to compression of fracture segments over the coronoid process. Recent advances in imaging like CT and MRI scans help to reinvestigate this in a scientific manner.

Objectives

This prospective study is done to investigate the correlation between the role of coronoid process compression by the fracture segments and injury of the surrounding muscles to post traumatic trismus associated with zygomatic complex fractures.

Patient and Methods

15 patients with zygomatic complex fracture in the age group of 16–65 years were included in the study. The assessment was carried out with the help of CT and MRI. All patients included in the study reported within 3 days of history of injury.

Result

CT evaluation showed that none of the zygomatic complex fracture cases had coronoid impingement even in the fracture which had maximum displacement. The MRI showed evidence of masseteric inflammation suggesting to be the more probable cause of trismus.

Conclusion

The CT and MRI evaluation helped to disprove the popular notion that the physical impediment of the fractured segment on the coronoid process caused trismus. Massetric inflammation seemed to be the more probable etiology of trismus in zygomatic complex fracture.

EP-MT 68
Role of intraoperative CT Scan in zygomatico-orbital complex fracture reduction

Preeti Sharma, Vidya Rattan, Sachin Rai, Shikha

Yadav PGIMER, Chandigarh

Abstract

Background

Current management of zygomatico-orbital complex fractures involves wide exposure to allow for direct visualization of fracture reduction at articulation sites. Even then, it is not possible to uniformly predict accurate postoperative results due to its 3-dimensional architecture. Therefore, intraoperative imaging can be used as a tool to improve surgical outcome in treatment of these complex fractures by allowing for immediate assessment of accuracy of repair and allowing for revisions if necessary at time of initial procedure.

Objectives & Methodology

This ongoing study evaluated the potential benefits of intraoperative computed tomography (Ceretome 8 slice CT scanner) in adequate reduction of zygomatico-orbital complex fractures with optimal number of incisions and fixation points. Anatomical reduction was evaluated on CT after clinical satisfaction of the surgeon and need for further surgery to improve outcome was noted. The impact on number of incisions for exposure and fixation point was also noted.

Results & Conclusion

As this is an ongoing study, results & conclusion will be further added in the poster to be presented at conference.

EP-MT 69
The tale of two teeth

Cynthia Scott

SRM Kattankulathur Dental College and Hospital

Abstract

Foreign body aspiration or ingestion secondary to maxillofacial injuries in road traffic accidents is quite common in patients with altered consciousness of which aspiration can be a potential life threatening situation. The common foreign bodies include avulsed teeth, tooth fragment, dislodged dental prosthesis or even fractured restoration. This poster will showcase, a case report of a 20 year old male patient who reported to our casualty following road traffic accident. The patient had transient loss of consciousness. On examination the patient had only maxillofacial injury with fresh bleeding sockets in the lower incisor region. After complete clinical examination, as an emergency protocol management chest x-ray was taken

which revealed that the presence of the teeth in the upper GIT. Patient was kept under observation. Periodic radiographs suggested that the teeth had been passed in stools which were confirmed by the patient. This poster emphasizes the importance of thorough examination including intra oral examination in all trauma patients irrespective of the presence of extensive maxillofacial injuries. Rapid diagnosis depends on complete clinical examination, high index of suspicion and radiological findings which would facilitate an immediate intervention to manage a worst case scenario.

EP-MT 70
Primary assessment in trauma patients

Pooja Mandrekar, Vikas Dhupar, Francis Akkara

Goa Dental College and Hospital

Abstract
The initial evaluation of a person who has sustained poly trauma is a challenging task. Based on this management is critical as every minute can make the difference between life and death. Organized approach for trauma care is focused on the salvage of a patient from early trauma mortality followed by critical care which is designed to avert late trauma mortality. Recognition of these patterns led to the development of the Basic Life Support (BLS) and the Advanced Trauma Life Support (ATLS). BLS describes the level of medical care provided to individuals with severe injuries or illnesses before and during transport to a higher level of care. ATLS is the standard of care for trauma patients and it is built around a consistent approach to patient evaluation. These protocols ensure that the most immediate life-threatening conditions are quickly identified and addressed in the order of their risk potential. The objectives of the initial evaluation of the trauma patient are as follows: (1) To rapidly identify life-threatening injuries. (2) To initiate adequate supportive therapy. (3) To efficiently organize either definitive therapy or transfer to a facility that provides definitive therapy.

EP-MT 71
Paradyms in maxillofacial trauma management

Saurabh sharama

New Horizon Dental College and Research Institute

Abstract
With revolution in population and increasing number of road accidents, sports injuries and terrorism Management of maxillofacial trauma has developed in an evolutionary manner, with bursts of surgical creativity occurring during periods of war. Historical prospective of the knowledge which has been known for centuries, the various modalities of treatment developed over different times and how they have changed over the decades have been discussed: from conservative delayed operative repair, to an early aggressive one-stage approach; use of small incisions, minimal exposure of bony fragments, external pin fixations, intra-osseous wiring, prolonged intermaxillary fixation and minimal attention to primary soft tissue management have been changed. With advances in telecommunication and Radioimaging techniques, and adaptation of newer principles such as: the early one stage repair; exposure of all displaced fracture fragments; precise anatomic rigid fixation, immediate bone grafting, Endoscopic reductions, Resorbable plates if required and definitive soft tissue management, Cynoacrylate spray staplers for skin suturing, allowing for better return of patients to their pre-traumatic appearance or at least as close as possible. The newest concept of Air Ambulance and concept of Drones if applied practically to maxillofacial trauma management could also revolutionise the treatment outcomes there by saving millions of life in road traffic accidents. These newer modalities will also prove the vital role played by maxillofacial surgeons in saving lives.

EP-MT 72
Various treatment modalities for orbital floor reconstruction

Yash Chadha

Maaruthi Dental College, Bangalore

Abstract
Treatment of orbital floor fractures and defects is often a complex issue. Repair of these injuries essentially aims to restore the continuity of the orbital floor and to provide an adequate support to the orbital contents. Several materials and implants have been proposed over the years for orbital floor reconstruction, in the hope to achieve the best clinical outcomes to the patients. In this review, the advantages and limitations of the various biomaterials proposed and tested for orbital floor repair are critically examined and discussed.

EP-MT 73
Pan facial trauma—a case report

Krishnaa. Vijayan

Faculty of Dental Sciences, MS Ramaiah University of Applied Science

Abstract
Maxillofacial injuries form a major part of trauma in general. Routinely, Oral and Maxillofacial surgeons are called upon in major hospitals to diagnose and treat maxillofacial surgeries. Head injuries with or without panfacial trauma in patients are treated in M. S. Ramaiah group of hospitals. Panfacial fractures, as defined by Follmar are fracture patterns that involve at least three of the four axial segments of the facial skeleton: frontal, upper midface, lower midface, and mandible. These fractures result from road traffic accidents, interpersonal violence, sports-related accidents, industrial accidents, and gunshot wounds. Multisystem injury is commonly associated with panfacial trauma; thus, treatment is often multidisciplinary and requires proper coordination with neurosurgeons, anaesthetists and other critical care specialists along with oral and maxillofacial surgeons when the patient is primarily taken care. The goal of management of panfacial fractures is the restoration of both the function and preinjury three-dimensional facial contours, without unnecessary delay, while minimizing pain and suffering to the patient at the least possible cost to the victim and society. High resolution computed tomography (CT), adequate surgical exposure, accurate anatomic reduction, rigid fixation, primary bone grafting, and soft tissue suspension are the gold standard to obtain optimum results.

EP-MT 74
Osteosynthesis using the delta plate in mandibular condyle fracture

Sonal Anchlia, Ramyata Dayatar

Govt. Dental College and Hospital, Ahmedabad

Abstract

Background

Condylar fractures deserve a special consideration apart from rest of the mandible due to their anatomical differences and healing potential. But the sequelae of condylar injuries cannot be underestimated with regard to occlusion, reduced mouth opening, deviation of the mandible, impaired mastication, ankylosis and internal derangement. The disadvantage of two miniplates for fixation of condylar fractures is the requirement of a certain size of the proximal condylar fragment. It also includes use of excess armamentarium and increased exposure of the condylar region. The present study evaluates the clinical use of indigenously developed titanium delta-shaped miniplate in open reduction and internal fixation of subcondylar fracture.

Objective

The aim of this study was to evaluate in mandibular condylar process fractures the biomechanical stability of osteosynthesis using the Delta plate.

Methodology

This case series of 10 patients discusses the treatment of condylar fracture using Delta plate, approached by Hinds incision. After anatomic reduction, the fractures were fixed with a Delta plate. The base was oriented toward the angle of the mandible. The wound was closed in layers, taking special care of the parotid capsule.

Results

None of the plates broke. Osteosynthesis screw loosening was not registered in any patients. No Infection, parotid fistula or permanent facial nerve paralysis occurred. Post operative occlusion was normal. One patient reachieved occlusion after 2 days of post operative elastics.

Conclusion

This biomechanical study indicates that for rigid internal fixation of condylar fractures of the mandible, Delta plates fulfil the principles of a functional and stable osteosynthesis, resist physiologic strains and give greater primary stability.

EP-MT 75
Evolution of plating in maxillofacial—ancient to present

Ashutosh Tiwari

Teerthanker Mahaveer Dental College & Research Centre

Abstract

Several techniques for treatment of mandibular/maxillary fracture have evolved significantly in the past decade. From the time of Hippocrates, many different techniques for treating mandibular/maxillary fractures have been described the principle of which has always been repositioning and immobilization of the bony fragments. However, during the past 50 years, perfection of anaesthetic and radiographic methods, introduction of antibiotics, specially designed instruments, and advances in biomaterials have allowed maxillofacial surgeons to improve outcomes of treatment of mandibular/maxillary fracture while reducing morbidity. Over the years, the management of trauma has evolved from various forms of splinting to circum mandibular wiring, extra oral pins and semi rigid fixation with transosseus wiring followed by rigid fixation technique, which has lately given way to semi-rigid fixation with miniplate. The currently used conventional miniplate techniques require Maxillomandibular fixation for a short period and are unable to render 3D stability at the fracture site. Farmand, Dupoirieux (1992) presented a new system of plates made of titanium (3D plates). The quadrangular geometry of the plate assured good stability in three dimensions of the space. Easy use, good resistance against torque and compact form of the plate were some of the advantages. A major breakthrough in the field was achieved when Mostafa Farmand (1992) developed a new miniplate system, which takes advantage of the bio-geometry to provide stable fixation and he called it a "3D plating system". The 3D plating systems are based on the principle of obtaining support through geometrically stable configuration. The quadrangle geometry of plate assures a good stability in three dimensions of fracture, since it offers good resistance against torque forces.

EP-MT 76
Approach of ZMC through laceration: a case report

Siddharth Sharma, Pradeep Pattar

Nims Dental College, Nims University, Jaipur

Abstract

Zygomatic is a very common component of mid facial skeleton to fractured following trauma sometimes, zygomatic arch with frontozygomatic suture fracture occurs individually. There are various approaches for the same. This poster attempts to discuss and present a case on approach of ZMC fracture through existing laceration on right eyebrow and incision for both Frontozygomatic arch fracture treatment with easy access without damaging to facial nerve & less scar formation.

EP-MT 77
Extensive soft tissue laceration

Priyanka Das Jesabel

Krishnadevaraya College of Dental Sciences

Abstract

Soft tissue injuries whether isolated or in combination with other injuries, are amongst the most common traumatic craniofacial injuries encountered in our day to day practice. Soft tissue injuries may involve the skin, subcutaneous tissue, underlying muscle or a combination of any of these elements. Although rarely life threatening, the treatment of the injuries can be complex and may have significant impact on the patient's facial aesthetics and function. The final outcome depends on initial wound care and primary repair. Hence one should know the do's and don'ts. Disfigurement following trauma becomes a social stigma and has a detrimental effect on the victim's personality and future. Therefore such cases should be most

appropriately managed with thorough knowledge of applied anatomy, an aesthetic sense and meticulous atraumatic tissue handling expertise, along with surgical skills to repair all the composite structures simultaneously. Here we are presenting a case of soft tissue trauma following RTA with extensive tissue loss managed using proper anatomic orientation with local advancement flaps to correct the defect.

EP-MT 78
Panfacial trauma

Geeti Vajdi Mitra, Anurag Tripathi

Sri Aurobindo College of Dentistry, Indore (M. P.)

Abstract
Since last two decades much attention has been focused on developing an organized plan of repair that optimized retention of post traumatic facial form and functions. The goal of treatment as with all facial fracture is to restore both the functions and pre-injury 3-dimensional facial contours. In the present day scenario because of high velocity accidents, patterns of fracture are so varied. It is difficult to follow an established pattern of sequencing and organizing the repair of Panfacial fractures. The correct timing of surgical intervention and use of rigid fixation allows the restoration of morphological and functional nature of the face. Panfacial fractures usually refer to simultaneous facial fractures, which affect the upper, middle, and lower thirds of the face. The management of these fractures is complex because of the lack of reliable landmarks. Literature has shown many approaches for their management. Every segment of bone has a precise function in the repair. Therefore, the "bottom-up and outside-in" sequence is the most widely used approach in the management of panfacial fractures. These facial fractures present remarkable challenges for both experienced and inexperienced surgeons. Here we are presenting a poster with panfacial trauma managed at our institute.

EP-MT 79
Slow and steady heals the face—a c/o extensive soft tissue trauma

Ishan Singh

MCODS Mangalore

Abstract
Traumatic soft tissue injuries are commonly encountered in the emergency department by the maxillofacial surgeon either alone or in combination with bone injuries. Although seldom life threatening, they result in functional and cosmetic defects which are extremely disfiguring and negatively impact the emotional well being of the patient. Here we present a case of a fisherman who encountered a serious life threatening injury to his face at a usual day of work and presented to the casualty with injuries so extensive that the immediate prognosis was deemed to be hopeless. However after two long months of aggressive use of antibiotics and meticulous care of his wounds, he was discharged from the hospital with a reasonably good outcome, thanks to the wonders of the healing capacity of the human body which was synergistically helped by the treatment rendered to him.

EP-MT 80
Transparotid approach for condylar fractures

Kishan Panicker, G, Parul Ahuja

The Oxford Dental College Bangalore

Abstract
Surgery for mandibular condyle fractures must allow direct vision of the fracture, reduce surgical trauma and achieve reduction and fixation while avoiding facial nerve injury. Condylar fractures account for 25–35 % of mandibular fractures and deserve a special consideration due to their anatomical differences and healing potential. In spite of so many advances in the field of surgery, the management of condylar fractures in adults still remains controversial. Transparotid approaches with partial parotidectomy permits very good anatomical repositioning of displaced condylar or subcondylar osseous segments in all cases, since isolation of the facial nerve branches and removal of limited part of parotid gland tissue overlying the fracture allow perfect exposure of the fracture site. The wide operation field allows facial nerve to be preserved and permits easy internal rigid fixation with plates, as the drill, screws and screwdriver can be positioned exactly perpendicular to the bone surface instead of obliquely, as occurs with many different approaches.

EP-MT 81
Zygomatico-Maxillary complex fracture fixation: how much is enough ??

Mukul Padhye, Geetanjali Mandlik, Mohit Jain

D Y Patil University, School of Dentistry, Navi Mumbai

Abstract
Background
The prominence of the zygomatic region predisposes it to bearing the brunt of the facial injuries. Displaced fractures of the zygomatico-maxillary complex can result in significant functional and aesthetic sequelae. Many experimental biophysical studies have compared the stability of the zygoma after two and three-point fixation with mini plates.
Objective
This poster illustrates 2-point and 3-point fixation cases to achieve the surgical objective of stable fixation, thus raising the question of the need of 4-point fixation to restore function and cosmetics while minimizing the morbidities of the procedure.
Conclusion
Determination of the fixation points is case sensitive. Using a methodical, structured and planned approach to the surgery can provide good functional and cosmetic results, irrespective of multiple fixation points.

EP-MT 82
Eagle eye view—on soft tissue injuries to the oral and maxillofacial region

Vivek Narayanan, Saravanan, Karthik, Fathima Hafila

SRM Dental College, Kattankulathur, Chennai

Abstract
Soft tissue injuries in the maxillofacial region are very common. These injuries can occur due to Road Traffic accidents/Interpersonal violence/fall/sports injury etc. These soft tissue injuries can present with or without involvement of underlying bone injury and injury to the neighboring Neuro-vascular components. Identifying the depth, degree, loss of tissues and involvement of vital structures has to be meticulously assessed during primary clinical examination. As this area has multiple specialized tissues like the Nose, Ear, Eyelids and the Vermillion, meticulous planning is mandatory before reconstruction. Likelihood of presence of foreign bodies like dirt, earth particles in these wounds makes thorough debridement a necessary first step of treatment approach. The principle of management lies in prevention of infection in these areas, prompt repair to restore the function and cosmetics. Team approach with Maxillofacial-surgery, Plastic-surgery, Ophthalmology and ENT is emphasized for the best clinical outcome in these cases. This poster showcases various types of the soft tissue injuries in oral and maxillofacial region, reported and managed in casualty of SRM medical hospital and Research institute, Kattankulathur, Chennai.

EP-MT 83
Extra Corporeal Fixation of Mandibular Condyle

Abstract
There are various methods of fixation of mandibular condylar fractures. This is dependent on level of fracture, accessibility to the fractured site and dislocation of condylar stump (proximal segment). Here with we present a series of cases in which there was difficulty of access due to anteromedial dislocation of fractured condyle through retromandibular incision. so the proximal segment was taken out and fixed extracorporeally.

EP-MT 84
Different methods of intermaxillary fixation techniques

AJ Institute of Dental Sciences

Abstract
Numerous methods have been described for achievement of intermaxillary fixation in the treatment of fracture of facial skeleton. Intermaxillary fixation remains an important component in the management on many facial fractures.During intermaxillary fixation dental occlusion plays an important role as a guide and thereputic tool.Conventional methods like erich arch bar and eyelet wire are currently most common methods for achieving intermaxillary fixation but they have their own disadvantages. There are different new methods like Self tapping screws, Resin bonded arch bar. Use of acrylic occlusion splints and direct bonded brackets for intermaxillary fixation Vaccum formed thermoplastic splints with bonded wire cleats.

EP-MT 85
Comparsion of one or two miniplates in treating mandibular anterior fracture: A prospective study of 30 cases

Aseem

Abstract
Maxillofacial trauma is very frequent and associated with a high incidence of mandibular fractures. Some controversy still remains in the literature regarding the optimal treatment modality for mandibular fractures. Maxime Champy advised the use of two miniplates for symphysis/ parasymphysis fractures because of the high torsional forces in the anterior mandible with no MMF, but most surgeons use arch bars for intra-operative MMF or post-operative MMF for a short period. Because of the limited space available for fixation of screws and plates in the mandible, especially in the region of the mental foramen and apical region of the anterior mandible, and evidence of metal deposits in the direct proximity of titanium osteosynthesis plates or even in peripheral organs, reduction in number/size of plates was desirable. The size and amount of osteosynthesis used should therefore be kept to minimum but without compromising the desired stability.
Aim and Objectives
The study aimed to compare the outcomes of 2 groups in managing Mandibular anterior fractures using one or two 2.0 mm miniplate with arch bar.
Material and Method
This prospective clinical based study comprised of 30 patients who had to undergo ORIF mandibular anterior fractures via a trans-oral approach were randomly divided into two groups, each group consisting of 15 patients.
Results
The two groups were not significantly different in relation to post-operative infection, wound dehiscence, occlusal discrepancy, post-surgical pain at the operated site, and incidence of plate fractures/ loosening of plate/screw at various intervals of follow up over 6 Months post-operative period.
Conclusion
The results of the study suggested that one miniplate is as efficient as two miniplates because of less morbidity, less Intraoperative time and cost.

EP-MT 86
Recent advancements in plating systems for condylar fractures

Sanpreet, Ramandeep Singh Bhullar, Amneet Kaur, Yashmeet Kaur

Abstract
In recent years there has been a change in pattern of facial fractures which has necessitated improvement in the treatment modalities. The therapeutic aim in the treatment of fractures is anatomic alignment of bone fragments, adequate revascularisation and restoration of function with least vascularity. The treatment of condylar fractures remain controversial although there is growing evidence that surgical treatment provides better results. Open reduction and osteosynthesis is preffered for treating displaced and dislocated condylar fractures. Different approaches and different fixation techniques are used. The aim of this poster is to illustrate the recent advancements in plating techniques for condylar fractures.

EP-MT 87
Comparison between locking and non locking plates in mandibular condylar fractures: an invitro study

GITAM Dental College & Hospital, Visakhapatnam

S. Gokkulakrishnan, N. V. V. Satya Bhushan, M.Bharat Prakash

Abstract
In order to know the stability of the different single miniplates for the treatment of subcondylar fractures in formalin fixed human cadaveric mandibles. Study included 15 formalin fixed cadaveric mandibles osteotomised at the subcondylar region divided into three groups. Group A- Titanium 2.0 mm 4 hold straight with gap mini adaptation plate and 2*4 mm monocortical screws. Group B- Titanium 2.0 mm 4 hold straight with gap mini adaptation plate and 2*6 mm bicortical screws. Group C- Titanium 2.0 mm 4 hold straight with gap locking adaptation plate and 2*6 mm bicortical screws. All the three groups have similar clinical stability when tested for clinical end point and experimental end point. The results concluded that there is no significant difference in the biomechanical stability between the three groups which suggest that all the 3 plating systems are equally efficient in the management of subcondylar fractures.

Orthognathic Surgery and Distraction (code- EPOD)

EP-OD1
Soft tissue changes associated with orthognathic surgery

Deepika Gupta, Dinesh Verma, Shallu Bansal

Surendera Dental College and Research Institute

Abstract
The major goal of orthognathic surgery is the establishment of a balanced and stable dentoskeletofacial complex. one of the most important aspects of this end is the achievement of an esthetically pleasing facial soft tissue envelope. This mandates that the surgeon be astutely aware of the soft tissue response to the orthodontic and surgical movement of the dentoskeletal components of the face. As time passed, a greater concern for the aesthetic aspects of surgery developed and facial soft tissue prediction became an integral part of preoperative planning and post operative outcome assessment. in this poster we will present the soft tissue changes associated with different orthognathic surgical procedures.

EP-OD2
Splints in Orthognathic Surgery

Yuvraj Gupta, Dinesh Kumar Verma, Shallu Bansal

Surendera Dental College and Research Institute, Sri Ganganagar Rajasthan

Abstract
The success of orthognathic surgery depends on the possibility of the exact planning based on precise diagnosis. To achieve the optimal intercuspal relationship following orthognathic surgery temporary (dental splints) are fabricated. The outcome of orthognathic surgery is strongly influenced by the quality of splint and transferring the definitive relative position of mandible to maxilla. If a splint should fit badly or last minute change of surgical planning is needed, a new appointment may be required for fabrication of splint. The splints that are used in orthognathic surgery have their specific advantages & disadvantages. Here we are presenting a poster on splints in orthognathic surgery.

EP-OD3
Changes of Hyoid, Tongue and Pharyngeal Air Way After Mandibular Set Back and Advancement By Bilateral Sagittal Split Osteotomy—A Cepahalometric Study

Shanmuga Sundaram, Vinod Kumar Reddy

SRM Dental College

Abstract
Aim
To assess changes in the lower pharyngeal airway after mandibular advancement/ set back using lateral cephalograms.
Objectives
To Assess: 1. linear retroglossal air way status 2. Position of hyoid and supra hyoid musculature 3. Tongue Position.
Methodology
A prospective study was carried out at our Centre including 10 patients who reported to us for the correction of facial profile. 6 patients had under gone mandibular advancement and the rest 4 patients underwent mandibular setback as dictated by the clinical and radiographic examination. Post-operative lateral cephalograms (T1: Immediate T2: 3 Months Post op) were traced and compared with the pre-operative cephs to assess the change in the position of lower pharyngeal airway.
Results
In mandibular advancement cases: Increase in the antero-posterior dimension of Retroglossal airway. Tongue had attained a more anterior position, but in the late observation it attained an inferior position. Hyoid bone had an initial shift in the superoanterior direction. In mandibular setback cases: The Retro pharyngeal airway showed significant decrease in its antero-posterior dimension which relapsed, however, the pre-surgical dimension was never attained. There was permanent posterior positioning of the tongue. There was a permanent inferior shift in the hyoid bone position. Initial decrease in the length of the suprahyoid musculature which showed relapse in the follow-up period.
Conclusion
Our study reveals that there is a definite change in the dimension of the retroglossal airway. However the change in the position of the hyoid and suprahyoid musculature was transient being restricted to the immediate post-operative phase.

EP-OD4
Histomorphometry of Distracted Callus

Amit Bhandari, Gen NK Sahoo

AFMC Pune

Abstract
Background

Deficiency in the craniofacial skeleton has posed a challenge to craniomaxillofacial surgeons for many decades. The possibility of bone lengthening by means of distraction osteogenesis was suggested initially by Codivilla and later clinically and biologically established by Ilizarov. However in the present literature, very few studies analyse the histological quality of the consolidating regenerate in humans.

Objective

To evaluate and compare the histomorphometric interpretation of distracted mandibular callus after 8 and 12 weeks of consolidation.

Methodology

Twenty patients of mandibular corpus deficiency were operated for corpus lengthening by Distraction Osteogenesis. The cases were randomly divided into two equal groups. In group A, distractor device was removed after 8 weeks and in group B after 12 weeks. At the time of distractor removal, scraping was obtained from the callus for histological evaluation and histomorphometric interpretation.

Results

No statistically significant variation was found between two groups suggesting that 8 weeks consolidation is optimum as cited by various authors. Our results concurred with previous animal studies validating decreased consolidation of bone and increased remodelling with change in trabecular orientation and mass after 8 weeks.

Conclusion

Hence the distractor can be safely removed in mandible corpus after 8 weeks of consolidation.

EP-OD5
BSSO: A Versatile Procedure

Atul Joshi

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Abstract

Bilateral sagittal split osteotomy (BSSO), which is the most commonly, performed jaw surgery. Indications for a bilateral sagittal split include horizontal mandibular excess, deficiency, and/or asymmetry. It is the most commonly performed procedure for mandibular advancement and can also be utilized for a mandibular setback of small to moderate magnitude.

Objective

To correct the mandibular retrognathism.

Methodology

BSSO to advance the mandible and had cephalometric radiographs taken preoperatively and postoperatively at 3 months. The Cephalograms were traced and measured to determine the operative and postoperative changes.

Results

Presurgical overjet was 8 mm, overbite was 6 mm and mandibular length was 71 mm. Post surgical overjet was 3 mm, overbite was 4 mm and mandibular length was 76 mm.

Conclusion

BSSO is performed to correct a wide array of minor and major skeletal and dental deformities. The bilateral sagittal split osteotomy, or BSSO has evolved into an effective and preferred surgical procedure for mandibular advancement or setbacks.

EP-OD6
Surgery First Orthognathic Approach for correction of skeletal malocclusion

Rajesh Kshirsagar, Shashank Hiwarkar

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Abstract

Management of patients with skeletal deformities is orthognathic surgery involves both orthodontics and surgery. Nowadays, there are two approaches for orthognathic surgery: orthodontics-first and surgery-first approaches. The conventional approach i.e. orthodontics-first approach, or presurgical orthodontics treatment, causes longer treatment time and worsens facial appearance before surgery compared with a surgery-first approach. This presurgical period is considered to be important for adequate surgical treatment and stable results. Moreover, a surgery-first approach (SFA), i.e. minimal pre-surgical orthodontics, is one of the treatment choices in certain cases requiring surgery and orthodontic correction. Conversely, with the surgery-first approach or the surgery-first-orthognathic-approach (SFOA), correction can be resolved more rapidly. SFOA needs high level skill of orthodontist and surgeon and also needs good understanding between them to accomplish best results. In selected cases, SFA is a good and effective treatment alternative. I would like to present a poster with a purpose to review the concept, indications, and contra-indications, the stages of treatment and advantages, and disadvantages of SFOA.

EP-OD7
Treatment of Obstructive Sleep Apnea In Pediatric Patient Using Distraction Osteogenesis

Soumy Pandey

Rungta College of Dental Science & Research

Abstract

Obstructive sleep apnea is the most common type of sleep apnea and is caused by the obstruction of the upper airway. It is characterized by repetitive pause in breathing during sleep, despite the effort to breathe and is associated with a reduction in blood oxygen saturation. 1–10 % of children suffer from O. S.A. prime cause of the condition is congenital malformation leading to hypoplastic mandible and maxilla which leads to decreased pharyngeal airway, also adenotonsillar hypertrophy and obesity are responsible in few cases. Majority of children have mild symptoms and may outgrow the condition. consequences of untreated O. S.A. includes failure to thrive, enuresis, attention deficit disorder, behavior problems, poor academic performance and cardiopulmonary disorders. Distraction osteogenesis in recent times is proving to be a major breakthrough for treating O. S.A. due to hypoplastic maxilla and mandible. Underdeveloped maxilla and mandible are treated using distraction osteogenesis technique which leads to increase in the volume of pharyngeal airway, this treatment modality provides more permanent and reliable cure for the condition. The purpose of this poster is to emphasis the importance of

distraction osteogenesis in the treatment of obstructive sleep apnea in pediatric age group.

EP-OD8
Accuracy of Universal Transfer System In Transferring Maxillary Occlusal Plane For Orthognathic Surgery Planning

P. M. Srinisha, Sankar G. R

Saveetha Dental College and Hospital

Abstract

Background

Facebow transfer is an integral part of orthognathic treatment planning as it aids in obtaining a predictable treatment outcome. It is used in conjunction with an articulator to relate the maxillary arch to the condylar hinge axis in all three planes of space. It is important to reproduce the steepness of the occlusal plane, so as to avoid discrepancies in vertical dimension and occlusion, that could affect function and esthetics. Objective: This study was aimed to assess the accuracy of the Universal Transfer System (UTS 3D) in transferring the Maxillary Occlusal Plane for planning orthognathic surgeries. Methodology: Patients requiring Orthognathic Surgery for correction of dentofacial deformities were chosen for this study. Facebow records were obtained for all the patients using the UTS 3D system and were then transferred to Stratos 300 Articulator. The angle of the occlusal plane in relation to the horizontal was measured in the articulator and compared with values obtained from Lateral Cephalograms.

Conclusion

The values obtained from the UTS system fall within an acceptable range of ± 2 degrees difference from Cephalometric values and therefore can be recommended for routine treatment planning for Orthognathic Surgical procedures.

EP-OD9
A Study On Orthomorphic Correction of Mandibular Dysmorphology

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Abstract

Mandibular dysmorphology is largely the outcome of uncoordinated growth deficiency or excess and the result of compensatory deformations. Significant alteration of mandibular morphology is a common feature of congenital conditions. Orthognathic surgery for the correction of facial deformity arising from discrepancy in spatial relationship or dimensional differences is well established. However, when the cause of the deformity includes an alteration of the shape of the jaws, orthognathic surgery is unable to correct the resulting contour deformity. Hence, in the management of facial asymmetry, orthomorphic principles of management are an adjunct to orthognathic surgery or osseodistraction. The surgical correction consisting of an osteotomy aimed at restoring the morphology is denoted as orthomorphic to distinguish it from conventional orthognathic surgery. It aims to correct deformities related to shape and contour of the jaws without affecting the status of occlusion. The study was undertaken to evaluate the usefulness of orthomorphic surgery in correcting mandibular dysmorphology. This is a prospective study in which 5 patients having mandibular dysmorphology were treated using orthomorphic surgery, and were evaluated for outcome in terms of duration of surgery, assessment of mandibular split, neurosensory changes after surgery, assessment of mouth opening before and after surgery, postoperative assessment of mandibular symmetry and postoperative complications. The study revealed results in support of the technique mentioned, showing good success rate in terms of mandibular dysmorphology correction. The mandibular split was favourable with minimal neurosensory disturbance and without postoperative complications. Orthomorphic surgery will be useful in correcting mandibular dysmorphology.

EP-OD10
3-D Planning and Cad/Cam Splint Fabrication In Orthognathic Surgery

Shapath Pujara

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Abstract

Inaccurate visualization of the inter-occlusal relationship has raised an important challenge for orthognathic surgery which is based on cone beam computerized tomography (CBCT) and surgical splints. Computer-aided design and manufacturing (CAD/CAM) technique have been developed to avoid errors in the traditional model process and is a feasible and accurate way of transferring the 3-D plan to intra-operative procedures. The planned osteotomies and movements of bony segments relative to fixed structures are stored structurally in CAD/CAM templates. Surgeons can accurately transfer 3-D planning to the real operation without additional equipment by adjusting the position of the contact surfaces between the templates and bony segments until an exact fit is achieved. The level of concordance was used to compare the routine surgical splints with 3-D planning and computer aided diagnosis and manufacturing technique. This suggest that virtual diagnosis, planning and use of patented CAD/CAM surgical splint technique provides a reliable method that may offer an alternate, approach to the use of arbitrary and 2-dimensional planning.

EP-OD11
Correcting Facial Asymmetry

K. M Cariappa, Abhay T Kamath, Sreea Roy

Manipal College of Dental Sciences

Abstract

Correction of dentofacial asymmetry requires a surgeon's artistic skills, aesthetic sense, knowledge & surgical proficiency. It aims to improve the quality of overlying soft tissue, harmony of face & dental rehabilitation in terms of occlusion & speech articulation lessening the psychological & social burden of the patient. We treated 2 cases

of facial asymmetry by 3D model planning, technical evaluation in combination to orthognathic surgery. Post operatively there was marked improvement in facial appearance & proper harmonic occlusion was achieved.Both the patients were satisfied with their postoperative appearance & occlusion.

EP-OD12
The concept: Surgery first orthodontics later

Priyam Pathak, Mukul Padhye

D. Y. Patil University, School of Dentistry

Abstract
Concept
Surgery first orthodontics later Background: Contemporary orthognathic surgery includes presurgical orthodontics, surgery and postsurgical orthodontic treatment. The concept of SFOA is for minimum prior tooth movement or minimal tooth decompensation for one to two months in cases of occlusal interference, to use surgery to rapidly achieve facial esthetic improvement. Shorter treatment outcome & better patient compliance are some of the salient features of this technique.
Objective
To evaluate treatment outcome of 5 cases by this technique Materials & Methods: 5 patients with mandibular prognathism.
Results
Short-term results of stability were satisfactory along with better patient compliance.
Conclusion
The surgery-first orthognathic approach with minimum presurgical orthodontic treatment was found to be predictable and applicable to treat class III dentofacial deformities. Long term results are still awaited.

EP-OD13
Correction of square jaw with low angles using mandibular "V-line" cortical osteotomy with myomectomy

Manoj Kumar KP, Jasmine John K

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Abstract
Background
A prominent mandibular angle produces a characteristic quadrangle, coarse and masculine appearance. So woman who has a wide and square face prefer to have an ovoid facial contour."Square jaw with low angle deformity" means that the gonial angle is below 120 degrees or approximately 90 degrees and mandibular plane angle is less than 30 degrees. Objective: A slender oval facial outline could be achieved by using mandibular "V-line" osteotomy and myomectomy of muscle masseter. It might be a feasible and a reasonable surgical procedure for a young woman who had square face with low angles.
Methodology
Here we are presenting a 19 year old woman treated with mandibular "V-line" cortical osteotomy and myomectomy of masseter muscle.
Results
Postoperative appearance of patient showed that width of lower face was reduced expectedly; the gonial angle and mandibular plane angle were increased effectively.
Conclusion
The final aesthetic outcomes were quite satisfactory in achieving more feminine facial contour.

EP-OD14
Bilateral Sagittal Split Osteotomy Surgery For Prognathic Mandibale—A Case Report

Rituparna Saha

Sree Balaji Dental College and Hospital

Abstract
One of the techniques used of mandibular setback or advancement is bilatteral sagital split osteotomy. Bsso was first introduced by trauner and obwegeser in 1957.
Indication
Horizontal mandibular excess, deficiency and asymmetry correction of open bite correction of cross bite. Excellect operation procedure for mandibular advancement excellect operative procedure for setback this procedure of choice for minor asymmetries. Mandibular advancement for correction of sleep apnea.
Objective
Excellect operation proceure for mandibular setback.
Methodology surgical procedure
Incision made on the lateral crest of alveolus, extended up the anterior border of ramus and anteriorly along the exteral oblique ridge as far as 1st or 2nd molar. Dissection done. Osteotomy-lingual cortex of ramus from ant. Border of ramus passing backwards to just reach superior and posteriorly to lingula. External oblique ridge-cuts made down along anterior border of the ramus, medial to external oblique ridge then forward to about the 2nd molar tooth. Vertical cut-lateral cortex of the body down to and through the lower border of mandible. Fixation by monocorticle plates and screws.
Conclusion
It is well accepted by patients as its a transoral procedure and the post-operative results are excellent.

EP-OD15
Callotasis: No Condyle To Neocondyle

Pooja RamnanI

RCDSR

Abstract
The process of slow bone expansion by distraction osteogenesis in conjunction with functional remodeling can be used for the reconstruction of a neomandible and neocondyle. This is the technique of transport distraction osteogenesis. The mandible acts as the bony template for reconstruction such that the neomandible formed has the

same size and shape as the native mandible covered by gingiva. Patients are encouraged to open and close their mouth during the distraction process, such that the transport disc remodels to form a neocondyle. It allows enhanced prosthetic reconstruction and can be successfully used to treat patients with degenerative joint disease, condylar resorption, and bony ankylosis. This poster illustrates application of this technique in a post- ankylotic patient for reconstruction of a neomandible and neocondyle.

EP-OD16
Bi Jaw Surgery In Correction of Facial Deformities

D. Suresh, A. P. Mohan, K.A. Jeevan Kumar, B. Pavan Kumar

Kamineni Institute of Dental Sciences

Abstract

Introduction

Several major changes in the treatment approach to patients with dentofacial deformities began in 1960 s when communication between orthodontists and oral and maxillofacial surgeons regarding patient care dramatically improved. Several changes and improvement in surgical technique, as well as innovations in instrumentation, allowed surgeons to perform accurate and efficient surgery via intraoral approach with acceptably low levels of patient morbidity.

Background

Orthodontic camouflage was replaced with a combined orthodontic surgical treatment approach to achieve an ideal result based on specific dental and/or skeletal deformity present. An intraoral surgical technique improved for the defect in both upper and lower jaws. In this technique bimaxillary surgery is carried out simultaneously.

Conclusion

Improvements in surgical techniques and instrumentation resulted in decreased surgical time and improved patient recovery. These factors helped to perform combined maxillary (Lefort I) and mandibular ramus surgery during the same operative procedure in a safe and predictable fashion.

EP-OD17
Segmental Transport Distraction In Maxillofacial Surgery

Nitish Kumar Panda

Institute of Dental Science

Abstract

Distraction osteogenesis (DO) is a useful technique for reconstructing bony defects without performing grafting procedures in the maxillofacial region. Traditional theory believes that an adequate blood supply to the distraction site is critical for osteogenesis. Therefore, clinicians need to ensure that the soft tissues surrounding the site of the proposed distraction are well vascularized. This technique includes minimizing cuts and reflection of the periosteum on a transport segment; repositioning and suturing the cut periosteum to cover an osteotomy line, which becomes the distraction gap; and fixing an internal distraction device supraperiosteally. This E poster explores the possibilities and outcomes of segmental transport distraction in oral and maxillofacial surgery.

EP-OD18
Different Surgical Management of Obstructive Sleep Apnoea

Saurav Dutta

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Abstract

Obstructive sleep apnoea (OSA) syndrome is a potentially serious disorder affecting millions of people around the world. Many of these individuals are undiagnosed while those who are diagnosed, often exhibit poor compliance with nightly use of continuous positive airway pressure (CPAP), a very effective nonsurgical treatment. Various surgical procedures have been proposed to manage and, in some cases, treat OSA. Effective surgical management of OSA depends upon developing a complete database and determining different levels of obstruction, which may include nasal, nasopharyngeal, oropharyngeal, and hypopharyngeal/retrolingual, or a combination of these sites. A systematic approach to clinical evaluation, treatment planning and surgical management is recommended and is likely to result in more predictable outcomes. Surgical treatment may involve various procedures that are performed in different stages depending on the patients sites of obstruction. The most commonly performed procedures include nasal reconstruction, uvulopalatopharyngoplasty (UPPP), advancement genioplasty, mandibular osteotomy with genioglossus advancement, and hyoid myotomy and suspension. In more severe cases, maxillomandibular advancement (MMA) with advancement genioplasty may be indicated.

EP-OD19
Golden Proportion:Surgeons Unnoticed/Overlooked Entity

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M. A. Rangoonwala College of Dental Sciences

Abstract

Golden Proportion: Surgeons Unnoticed/Overlooked Entity The beauty of the face lies in the eyes of the beholder. Humans prefer attractive faces over unappealing ones. Our preference for attractive face exists form early infancy and is robust across age, gender, ethnicity. Now the quest is to define the beauty of face either by the shape and form or by spatial relation between the facial features. This dates back to antiquity when the Greeks believed that the beauty was represented by a golden ratio. The divine proportion of this ratio is 1:1.618. or represented by Phi (É¸). This ratio aids the clinician in determining the area most out of harmony and balance and hence determines the best approach to achieve harmonic unity in aesthetics, which in most instances leads to functional concord and competence. Many guidelines, norms, and standards have been proposed to describe ideal proportions in the human face, and for a long time, golden proportions have supposedly been apparent in the ideal human face. The golden proportion was described geometrically in the 4th century BC by Euclid as the unique division of a line (AB) into 2 parts (AC and CB) in such a way that AB:AC = AC:CB. This poster lays emphasis on the golden proportion which is often overlooked by us whilst planning/predicting results of orthognathic surgery.

EP-OD20
Distraction Osteogenesis: Reconstructive Surgeon's Armamentarium

Lalit Janjani

Armed Forces Medical College

Abstract
Distraction osteogenesis (DO), a useful technique to generate bone and soft tissue, can be applied to craniofacial reconstruction, including orthographic surgery; cleft lip and palate reconstruction, new mandibular condoyle regeneration, a dentoalveolar unit reconstruction for dental implants and transport DO for discontinuity defects. It begins with the development of a reparative callus between the edges of two bone segments divided by a low-energy osteotomy. Regardless of the surgical site, adherence to the basic Ilizarov principles is the key to surgical success which includes osteotomy of the bone site with minimal periosteal stripping followed by a latency period followed by desired distraction and appropriate consolidation. Treatment planning for distraction osteogenesis includes predicting the amount and trajectory of the planned bone movement. With increasing clinical experience, the long-term outcome and the specific role of distraction osteogenesis are better defined today. Clearly, distraction can generate bone with the capacity for remodeling and adaptation to functional loads. Distraction techniques allow the surgeon to intervene earlier in childhood to restore the facial form and function, but the extent to which it eliminates subsequent conventional procedures remains uncertain. The extent to which distraction osteogenesis will replace conventional approaches depends largely on technical innovations that will allow for implantable multidirectional devices that can be easily activated and controlled remotely with minimal incisions. This paper intends to provide a brief overview of distraction osteogenesis technique and the utilization of these principles in various treatment modalities in the field of oral and maxillofacial surgery being carried out at our institute.

EP-OD21
Mandibular Reconstruction Through Transport Distraction

Tanvi Vijay

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Abstract
Introduction
Mandibular defects usually involve a combination of osseous and soft tissue deficiency and are among the most challenging problems in maxillofacial surgery, many options are available for mandibular reconstruction. One of the options discussed in literature recently being distraction osteogenesis.
Aims
1. The aims of the study were to evaluate clinically the technique of distraction osteogenesis to reconstruct mandibular defects, using indigenous transport distractors, and 2. To evaluate the efficacy of indigenous transport distraction osteogenesis device.
Methods
Retrospective study was carried out where defects of the mandible were subjected to distraction osteogenesis with indigenously manufactured distraction device. The regenerate was assessed clinically and radiographically.
Result
The results showed that the regenerate was clinically as hard as the adjacent unaffected mandible and radiologic evidence of bone regeneration was observed. The major advantage being regeneration of hard tissue and soft tissue components without the morbidity of donor site, so that functional rehabilitation of the patient is possible.
Conclusion
Mandibular reconstruction with transport distraction osteogenesis is a potentially reliable & affordable technique in selected patients with segmental mandibular continuity.

EP-OD22
Maintenance of Condyle -Proximal Segment In Orthognathic Surgery

Anu Sudha. P, Bala Jagannath Gupta B

Saveetha Dental College and Hospital

Abstract
Background
Bilateral sagittal split osteotomy has become a preferred surgical procedure for correction of mandible protrusion, retrussion and open bite. Positioning of the condyle after sagittal ramus osteotomy of mandible is the biggest disadvantage.
Objective
The objective of the study is to evaluate the use of condyle positioning device by comparing the postoperative condyle proximal segment displacement with or without the use of this device. Methodology: Sample comprised of 10 patients bilateral sagittalsplit advancement osteotomy was carried out in group one patient and a bilateral sagittal split setback osteotomy was carried out on group two patient.
Results
Mean vertical displacement in an inferior direction of 0.89 mm from the pre-operative position was observed in the non CPD group, compared with 0.41 mm inferior repositioning in the CPD group. The difference between these value were statistically significant at $P < 0.05$. Horizontal condyle displacement in a posterior direction of 0.64 mm from the preoperative position was observed in the non CPD group and improved significantly to 0.40 mm when was used $P < 0.05$.
Conclusion
10 patients with mandibular prognathism were included of which CPD was used in 5patient and the other 5 patients had undergone surgery without any device. In the non CPD group the condyle proximal segment showed a tendency to move posteriorly and inferiorly to a greater extent than the CPD group.

EP-OD23
Distraction Osteogensis

Raghav Mehta

Mahatama Gandhi Dental College and Hospital Jaipur Rajasthan

Abstract
BackgBround: Distraction osteogenesis is a technique that relies on the normal healing process that occurs between controlled, surgically osteotomized bone segments. De novo bone lengthening occurs by

gradual, controlled distraction. In contrast to traditional approaches, the soft tissue envelope (the skin, muscle, and neurovascular structures) is simultaneously expanded, which stabilizes the skeletal reconstruction. The technique today is an important part of the reconstructive surgeon's armamentarium.

Objective

To review evolution of distraction osteogenesis and to discuss indications, advantages, disadvantages, and recent advances of these techniques.

Method

The patient underwent bilateral extraoral ramus and corpus distraction osteogenesis. After seven days of latency period, distraction was performed 0.5 mm twice a day. Subsequent consolidation period was 12 weeks.

Conclusions

Distraction osteogenesis continues to grow as a leading method of surgical correction for a variety of craniofacial defects. Current research shows significant studies in making distraction more effective and efficient to use for both the surgeon and the patient. With the growing popularity of these procedures, the up-to-date knowledge of the facial plastic and reconstructive surgeon in these advances is of utmost importance.

EP-OD24
Clinical and Radiological Evaluation of Hard and Soft Tissue Changes After Orthognathic Surgery

Neelakamal Hallur, Asiya. M. Kaladgi. Aaisha Siddiqua, Syed Zakaullaha, Ashwin Shah, Chaitanya Kothari, Shereen Fatima, Juhi Bendigeri

AL- Badar Rural Dental College and Hospital, Gulbarga, Karnataka

Abstract

Introduction

A significant number of patients with severe malocclusions and Dentofacial deformities with a desire to improve facial aesthetics choose surgical-orthodontic treatment.

Aims and objectives

To evaluate clinical and radiological hard and soft-tissue changes after Orthognathic surgery in patients having convex profile.

Materials and methods

Pre-operative (T0) lateral cephalogram were taken and post-operative (T1) lateral cephalogram were taken at 3rd month for all the patients. Pre-operatively and post-operatively COGS analysis was done. Silhouettes were created using traced soft-tissue profiles and standardized. A survey was conducted using the Silhouettes which included the Surgical patient, 5 Oral and Maxillofacial Surgeons and 5 laypersons.

Results

Significant difference was found between Profile Assesment Score (PAS) of T1 and T0 in all the groups, with the maximum difference being in the Laypersons group with a t-value = 18.55.

EP-OD25
Distraction osteogenesis

A. P. Mohan, Jeevan Kumar, Pavan Kumar, D. Satish Kumar

Kamineni Institute of Dental Sciences

Abstract

Background

Distraction osteogenesis is a biological process of new bone formation between the surfaces of two bony segments that are gradually seperated by incremental traction. Process is initiated when the force is applied. Objective: Correction of craniofacial skeletal deformities.

Methodology

Device is placed and the traction is achieved by mechanical force.

Results

Optimal results can be achieved when all the guidelines are followed.

Conclusion

Osteogenesis Distraction offers navel solutions for craniofacial anomalies and future yield cotinuous advance entity.

EP-OD26
Retrognathia: BSSO or Distraction

George Varghese, S. Mohan, Dibin. R

Govt Dental College, Kottayam

Abstract

Bilateral sagittal split osteotomy (BSSO) and distraction osteogenesis (DO) are the most common techniques currently applied to surgically correct mandibular retrognathia. It is the responsibility of the maxillofacial surgeon to determine the optimal treatment option in each individual case. Here review of literature on BSSO and mandibular DO with emphasis on the influence of age and post-surgical growth, damage to the inferior alveolar nerve, and postsurgical stability and relapse was done. Although randomized clinical trials are lacking, some support was found in the literature for DO having advantages over BSSO in the surgical treatment of low and normal mandibular plane angle patients needing greater advancement (>7 mm). In all other mandibular retrognathia patients the treatment outcomes of DO and BSSO seemed to be comparable. DO is accompanied by greater patient discomfort than BSSO during and shortly after treatment, but it is unclear whether this has any consequences in the long term. There is a need for randomized clinical trials comparing the two techniques in all types of mandibular retrognathia, in order to provide evidence-based guidelines for selecting which retrognathia cases are preferably treated by BSSO or DO, both from the surgeon^{TM}s and the patient^{TM}s perspective.

EP-OD27
Distraction for PRS

Kiran Gadre, Sushant Parbat

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Abstract
Background
Pierre Robin sequence is named after the French stomatologist who, in 1923 and 1934, described the problems associated with new born. It is characterised by micrognathia, retrognathia, glossoptosis and cleft soft palate. The developmental anomaly was originally classified as a syndrome but was reclassified as a sequence in 1982 because the associated anomalies are due to a primary aetiology, unlike a syndrome.
Objective
The major risk for neonates with sequence is prolonged hypoxia due to airway obstruction, which can lead to brain damage and death. Most of these children can improve by being placed in a prone decubitus position until proper growth of the mandible which clears the airway. In patients with severe mandibular hypoplasia and obstructive crisis, surgical treatment is necessary, such as glossopexy, tracheostomy and the more recently proposed mandibular distraction osteogenesis.
Methodology
The distraction osteogenesis/ histiogenesis has many advantages and can achieve advances of 20 mm or more with no bone grafts. It is superior to other techniques because it is a gradual biological process, with positive effects on muscles, nerves and soft tissues.
Results
The newly generated bone will be of a better quality bone and can be modelled, and it is a rehabilitation technique for severe craniofacial malformations that we can use at any stage of life.
Conclusion
The E-poster shares a case of mandibular micrognathia in which distractors were placed bilaterally with preservation of IAN with piezo and advancement of the mandibular segment was achieved.

EP-OD28
Revision of Occlusion with BSSO—A Case Report

Aniket Pujari, Aruna Tambuwala

M.A. Rangoonwala Dental College, Pune

Abstract
Background
The bilateral sagittal split osteotomy is an indispensable tool in the correction of dentofacial abnormalities. The technique has been in practice since the late 1800 s, but did not reach widespread acceptance and use until several modifications were described in the 1960 s and 1970 s. Those modifications came from a desire to make the procedure safer, more reliable, and more predictable with less relapse.
Objective
This poster highlights a case of deranged occlusion secondary to bilateral condylar fracture treated by BSSO.
Methodology
It was treated by Closed Reduction (IMF) as the patient was reluctant for extraoral approach. Prosthetic rehabilitation was attempted which proved futile hence surgical correction for revision of occlusion was done.
Results
Satisfactory occlusion with maximum possible intercuspation was achieved with the correction of anterior open bite.
Conclusion
BSSO continues to be a very dependable, consistent method of correction of many types of malocclusion. Keywords: Bilateral sagittal split osteotomy, Prosthetic rehabilitation, Occlusion.

EP-OD29
Bimaxillry Osteotomy—A Case Report

P.Balreddy, K. R. Madhuri

Government Dental College and Hospital, Hyderabad

Abstract
Corrective jaw or orthognathic surgery is performed to correct a wide range of minor and major skeletal and dental irregularities, including the misalignment of jaws and teeth. orthognathic surgical procedures can bring about a marked alteration to their facial form and function to make it both functionally efficient as well as aesthetically pleasing. In certain patients, single jaw surgery will not result in the optimal outcome that can be achieved through Bimaxillary osteotomy. Here I am going to present a case report of a patient with vertical maxillary excess, bimaxillary protrusion and deficient chin treated with Lefort 1 osteotomy, BSSO and Genioplasty.

EP-OD30
Virtual Surgical Planning in Orthognathic Surgery

Ramdas Balakrishna, Soumyarup Sen

KLE Society's Institute of Dental Sciences, Bangalore

Abstract
Computer-aided surgical simulation (CASS) has greatly enhanced the efficiency and accuracy of dentofacial deformity correction through orthognathic surgery. VSP (Virtual Surgical Planning) improves the efficiency of the presurgical work-up, provides an opportunity to illustrate the multidimensional correction at the dental and skeletal levels, provides preoperative insight into the surgical intervention, and has proved accurate in the transfer of the virtual plan to the operating room. Although the outcome of orthognathic surgery depends on attention to intraoperative surgical technique, the creation of a precise presurgical plan is essential in treatment planning the correction of dentofacial deformities. VSP is rapidly becoming the standard for correction of complex dentofacial deformities. CASS provides tremendous preoperative insight into the dental and skeletal movements anticipated, osteotomy orientation, and positioning and accurately transfers the virtual plan to correct the malocclusion and skeletal deformity. The efficiency offered by CASS to conventional

model surgery can return hours to a surgeons day through a more streamlined work-up and smoother intraoperative experience with confidence in the surgical accuracy that can in turn be devoted to other professional or personal obligations.

EP-OD31
Distraction Osteogenesis As An Adjuvant Procedure To Increase Mandibular Ridge Height To Facilitate Implant Placement In The Edentulous Mandible: A Case Report

Pushkar Waknis, Mayank N Patil

D. Y. Patil Dental College Pune

Abstract
Dental Implants form a major treatment modality for rehabilitation of completely edentulous arches. However, one of the major contraindications of implant placement is lack of adequate alveolar bone height and bone width. Ideal functional reconstruction should achieve sufficient alveolar height and thickness, allowing for permanent restoration of dentition, functional occlusion, mastication, deglutition and mandibular continuity, sensibility of the mucosa, lip competence and speech. Distraction Osteogenesis technique (DO) offers a solution for these problems. Distraction Osteogenesis, also called callus distraction (Ilizarov) is a routine surgical procedure. With this procedure, bone volume can be increased by gradual traction of a fracture callus formed between osteotomized bony segments. This poster presents Distraction Osteogenesis carried out on an edentulous female patient to increase the mandibular ridge height. The mandibular height was increased by 10 mm, followed by a consolidation period of 4 months. The device was then removed and the patient was sent for implant placement.

EP-OD32
A New Breath of Hope:Orthognathic surgery and Distraction in Crouzon's Syndrome

Vinay K. Sharma, Vidya Rattan, S. P. Singh, Sachin K. Rai, Akshat Gupta

Post Graduate Institute of Medical Education and Research, Chandigarh

Abstract
Background
Crouzon's syndrome is a rare genetic disorder characterized by premature fusion of skull bones. Orthognathic surgery and distraction are recommended as part of a staged reconstructive approach for the management of the maxillomandibular skeletal discrepancies and malocclusion in these patients.
Objective
We present a case of Crouzon syndrome with midface hypoplasia and permanent tracheostomy for severe respiratory distress. Management includes maxillary distraction, Orthognathic surgery and neck liposuction to remove permanent tracheostomy.
Methodology
Our report describes a case of Crouzon's syndrome with difficulty in breathing and recurrent chest infections for which he had undergone permanent tracheostomy and suffered associated complications, both physical and psychosocial. The patient underwent midfacial distraction at Lefort III level by RED device with an advancement of 16 mm. There was slight improvement in the postoperative respiratory conditions and facial appearance. After consultation with the ENT department, tongue repositioning with advancement genioplasty of 1 cm, mandibular advancement of 8 mm with BSSO, and neck liposuction was done.
Results
The maxillomandibular surgery and neck liposuction not only optimized the overall facial appearance but also led to significant increase in the posterior pharyngeal space allowing the removal of permanent tracheostomy and definite improvement in the quality of life of the patient.
Conclusion
Sequential distraction and orthognathic surgery resulted in definitive resolution of respiratory difficulty and improved psychosocial conditions in Crouzon's syndrome patients.

EP-OD33
Treatment of Facial asymmetry by simultaneous maxillary mandibular distraction

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Abstract
Treatment of Facial asymmetry by simultaneous maxillary mandibular distraction Facial symmetry refers to the bilateral symmetry of the face in which according to Merriam Websters, features are arranged on the opposite sides in such a way that if divided each side would be an identical half. A careful study shows that most facial deformities involve both middle and lower third of the face. Here is an illustrated case of facial asymmetry secondary to post traumatic fibrous ankylosis. Initially surgical correction of the fibrous ankylosis was done followed by active aggressive physiotherapy. The correction of facial asymmetry was then undertaken by simultaneous distraction of the maxilla and mandible resulting in achievement of reasonably acceptable facial symmetry. This preliminary report of a case shows that the method used here is a valid alternative to correct gross facial deformities.

EP-OD34
A Case of Unilateral TMJ Ankylosis Treated With Distraction Osteo Genesis Followed By Ankylosis Release and Augmentation Genioplasty

Sushil Kumar Sahoo

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Abstract
Orthognathic surgery has definitive role to play not just in restoring the esthetics, but also in mastication, phonetics and psychological aspects, in relation to restoring the self esteem of a patient. Here's presenting a case of a young female patient with congenital unilateral ankylosis of TMJ, with poorly developed and assymmetric mandible, and the patient is treated with distraction osteogenesis amd aumentation genioplasty.

EP-OD35
Distraction Osteogenesis

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Abstract
Ankylosis of TMJ leads to an era of functional growth and esthetic deformity, management of temporomandibular joint ankylosis has been recently modified by kabans protocol with the introduction of distraction osteogenesis. Distraction osteogenesis is indicated when mandibular lengthening is needed beyond 10 mm where conventional orthognathic surgeries couldn't achieve. In an overview of series of cases that are done in a 2nd stage protocol of TMJ ankylosis, doing distraction as first stage for correction of mandibular deformity and since 2nd stage TMJ ankylosis release. The unique of doing distraction osteogenesis prior gives the vector and magnitude of a distracted segment in a uni-direction.

EP-OD36
Assessment of Anatomical Position of Inferior Alveolar Nerve Using Computed Tomography In Bilateral Sagittal Split Osteotomy

G. Sai laxmi

Kamineni Institute of Dental Sciences

Abstract
Introduction
The sagittal split ramus osteotomy (SSRO) is now the most widely used orthognathic surgical procedure to correct jaw deformity. The mandibular canal is one of the most important anatomic structures about which surgeons need to have a detailed knowledge in order to prevent damage to the inferior alveolar nerve (IAN) which could lead to post-surgery neurosensory disturbance.
Objectives
To assess the anatomical position and pre-operative localization of inferior alveolar nerve and the mandibular canal within the framework of the mandible to prevent the injury.
Methodology
Pre-operative CT scans were taken with scan parameters of slice thickness, 0.63 mm; scan time, 26 s;120 kV;and 140ma/s using a Siemens Somatom AG CT scanner (Siemens, Erlangen, Germany) and analyzed DICOM data of the tomogram using the computer software version Syngo CT 2006A with four standard points-Mandibular foramen, Mandibular angle, Mandibular body and Mid-point (point intermediate between mandibularforamen and mandibular angle).
Results
Statistical analysis and correlations were performed using statistical package for social sciences (SPSS) statistics analysing software.Differences between pre-operative and intra operative dimensions were examined for statistical significance based on the independent samples t-test, and value less than 0.05 was considered a statistically significant difference.
Conclusion
Pre-operative CT imaging prior to BSSO surgical procedure is an effective way to investigate the position and course of the IAN canal through the framework of the mandible and by interpolating these dimensions intra operatively, reduces the risk of direct injury to the IAN bundle and further reducing the period and incidence of post-operative paresthesia in the patients

EP-OD37
Role of Volumetric Musculature Changes In Progressive Condylar Resorption After BSSO

Suresh Menon, Eera Mehta

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Abstract
A progressive condylar resorption is an extreme pathological change in the structure of the condyle leading to a loss of vertical height. It commonly presents as a bilateral condition, but unilateral presentation does occur. The condition usually occurs after bilateral sagittal split osteotomy (BSSO) to advance the mandible, although it may occur after conventional orthodontic treatment and can even be idiopathic. This poster correlates the role of changes in cross-sectional area, volume, and direction of the masseter and medial pterygoid muscle after bilateral sagittal split osteotomy (BSSO), along with the presence of high mandibular plane angle to developing progressive condylar resorption.

EP-OD38
Distraction Osteogenesis In OMFS: Choice, Chance & Changes

Nitin Purohit

College of Dental Sciences, Davangere

Abstract
Background
Distraction Osteogenesis (callus distraction, callotasis, and osteodistraction) is a biologic process that leads to bone formation between two bony segments that are mechanically separated at a constant rate. Over the last 50 years, Ilizarov refined a method to successfully lengthen endochondral bones and the surrounding soft tissue matrix.
Objective
The present poster gives a glimpse of roles of distraction osteogenesis in various pathologies of oral and maxillofacial surgery. As a changing trend in oral and maxillofacial surgery distraction can be used from small preprosthetic procedurs like alveolar augmentation to large reconstructions of mandible and also for syndromic cases.
Methodology
Distraction devices can be categorized by whether they are internal or external, the direction of distraction, and the site of application. External devices are capable of either unidirectional, bidirectional, or multiplanar (three-dimensional) distraction. Distraction devices used to lengthen the mandibular ramus and body, widen the mandible, augment the alveolar ridge, conduct bone transport, and advance the midface are reviewed.
Results & Conclusion
Given the difficulties in reconstructing deformities of the craniofacial complex, distraction osteogenesis has recently been used to avoid the problems associated with conventional surgery and to begin correction at an earlier age. Future may witness the use of the concepts of distraction osteogenesis to achieve better, faster & more efficient tooth movement.

EP-OD39
Impact of Mandibular Advancement On The Oro-Pharyngeal Airway In Patients With Mandibular Hypoplasia

Sreekumar K, Sanchit Goyal

Meenakshi Ammal Dental College

Abstract
Upper airway patency during wakefulness and sleep is determined by the interaction between anatomic and physiologic factors. During wakefulness, airway patency is maintained by increased muscle activity of the pharyngeal dilators. The contribution of the mandible in determining its pharyngeal space dimensions is well established. OSA will present as daytime hypersomnolence, disrupted sleep patterns, headaches, loud and snoring. Acute and chronic airway obstruction result in apnoeic episodes leading to hypoxia, secondary cardiac and respiratory problems. A variety of surgeries for the management of OSAS with Mandibular dysmorphology have been described. Congenital disorders in pediatric group are dealt with distraction osteogenesis. Surgical advancement of the mandible in adult patients with OSA has resulted in significant improvements in their Respiratory Disturbance Index (RDI). Aim: To evaluate the impact of the mandibular advancement on the oro pharyngeal airway in patients with mandibular hypoplasia.
Objectives
1. To identify airway changes sufficient to induce functional disturbances. 2. To assess change in the AHI in patients with OSA syndrome. 3. To analyse the three dimensional pharyngeal airway changes post operatively. METHODS The patients were evaluated pre- and post-operatively with parental questionnaires, lateral cephalogram and polysomnography.
Procedure
All the subjects underwent Mandibular advancement surgeries. The subjects were divided into 2 groups. Group 1: Procedures involving occlusion-bearing segment (Corpus lengthening) Group 2: Basal bone correction Results: Mandibular advancement was successful in all 10 patients. The lateral cephalogram and SSD images at the end of distraction revealed forward lengthening of the mandible. Significant improvement in the 3D volume of the pharyngeal airway and on polysomnographic study 83 % of patients were benefitted. There was reduction in subjective symptoms and decrease in AHI from 43.7 to 18.
Conclusion
AHI value, oxygen saturation, three dimensional pharyngeal volume and linear measurement of the lower pharyngeal airway, significantly improved following mandibular advancement surgeries.

EP-OD40
Alloplastic Implants In Chin Augmentation

Hiren Patel, Haren Pandya, Hitesh Dewan, Bijal Bhavsar, Urvi Shah, Shripal Jani

Faculty of Dental Science, Dharmsinh Desai University, Nadiad, Gujarat

Abstract
The position of chin is important in establishing correct facial proportion. The chin gives the appearance of strength of face. Facial balance is critical for good facial esthetics. Surgery of the chin has been used for decades to achieve a balance of the lower third of the face. This balance is vital in the establishment of an acceptable esthetic outcome. Chin augmentation is a procedure that involves creating a more proportionate face and a stronger chin line with the help of chin implants. Chin augmentation surgery is a relatively simple process that involves making an incision directly above the bone and creating a pocket in which the implant may be placed. The incision may be made inside the mouth or under the chin or it may be made extraorally through submental region.

EP-OD41
Distraction Osteogenesid In Mandibular Abnormalities

Arundhati Singh

Krishnadevaraya College of Dental Sciences, Bangalore

Abstract
Mandibular abnormalities pose a major concern in an individual due to facial asymmetry and functional deficits associated with it. They can be due to congenital or acquired deformities. Hemifacial microsomia, Pierre Robin syndrome and Treacher Collin syndromes are among few congenital conditions that present with mandibular hypoplasia. Among the acquired TMJ ankylosis is the most commonly seen, along with malunited fractures of mandible that often results in mandibular deformities. Distraction osteogenesis has established a wide range of applications in lengthening of long bones. Its application in oro-facial regions has emerged tremendously and has become a mainstay in the reconstruction following congenital or post traumatic deformities. In treating such problems, it has the advantages of both increasing the bone and soft tissue envelope and avoids the use of bone grafting. We are presenting the various applications of distraction osteogenesis in the various congenital and acquired deformities patients that reported to us. Distraction osteogenesis thus proves a good option with stable results for improving patient^{TM}s functional and aesthetic outcomes and also with reduced chances of relapse.

EP-OD42
Callotasis In Management of OSA—A Case Report

Subhankar Paul

Sree Balaji Dental College and Hospital

Abstract
Distraction osteogenesis (DO), also called callus distraction, callotasis, osteodistraction, and distraction histogenesis is a biological process of regenerating new formed bone and soft tissue by gradual and controlled traction of the surgically separated bone segments. The direction and amount of the applied distraction forces and the regenerative capacity of the tissues involved are vital in success of DO. The clinical applicability of DO is dependent upon type of device used and the tissue response. Device-related factors affect the mechanical integrity of the distractor and the stability of bone fixation. The clinical result of the distraction procedure depends on the number, length, and diameter of fixation pins, the rigidity of the distractor fixation, and the material properties of the device along with the orientation of the distraction device and the resulting

distraction vector. Tissue-related factor affecting the quality of the generated distraction, tissue include cross-sectional area, the density of the distracted bone segments, the length of the distraction gap, and the tension of the soft tissue envelope. In the area of maxillofacial skeleton DO can be used an alternative to traditional surgical treatment of Congenital and acquired deformities. Here, the Biomechanics of DO will be discussed in the management of obstructive sleep apnoea.

EP-OD43
Correction of Post Ankylotic Facial Asymmetry With Bimaxillary Distraction Osteogenesis-A Case Report

Abhishek Kumar

King George's Medical University, Lucknow

Abstract
Presenting a case of post ankylotic facial asymmetry with occlusal can't which was treated by bimaxillary distraction osteogenesis. Simultaneous mandibular and maxillary distraction corrected the facial asymmetry without disturbing the preexisting compensated dental occlusion. Post ankylotic facial asymmetry with occlusal can't was treated by lengthening ramus and leveling occlusal plane with bimaxillary distraction osteogenesis simultaneously.

EP-OD44
Management of Mandibular Hyperplasia

Naresh Kumar, Akhilesh Singh, Vishal Verma

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Abstract
Background
Hyperplasia is a three-dimensional enlargement of the mandible, including the condyle and the ramus on the affected side. It ends at the midline of the symphysis. The chin deviates to the unaffected side and the lower mandibular border is asymmetrical. The occlusal plane is tilted and the patients have different types and degrees of malocclusion.
Methods
25 year old female patient reported with the chief complaint of increase in the size of her right lower jaw past 3 year. Pain while opening mouth forcefully.Deviation while opening mouth managed by resection of the mandible on the right (affected) side.
Result
Facial symmetry is achieved with slight discripency and open bite. On regular follow up open bite is managed by intermaxillary fixation.
Conclusion
Various treatment strategies have been proposed and described. These techniques range from relatively simple, such as condylectomy, to complex procedures including bimaxillary surgery associatedwith complex mandibular osteotomies. All procedures result in improvement in the facial asymmetry to varying degrees. However, the majority of published resultsillustrate the difficulty in achieving absolute symmetry.

EP-OD45
Determination of Efficacy of Platelet Rich Plasma (Prp) In Accelerating The Mineralisation Content of New Bone Regenerate Following Distraction

Dayanithi B. S

Meenakshi Ammal Dental College -Chennai

Abstract
Introduction
Recent efforts to improve wound healing have focused on auto genus sources of bioactive mediators, such as platelet rich plasma (PRP), which offer the potential to enhance the bone healing.
Aim
The aim of this work was to study the effect of platelet rich plasma in enhancing the mineralization process following distraction osteogenesis.
Patients and Methods
6 patients who underwent distraction of maxilla/ mandible where selected for the study. Prepared PRP was injected into the distracted callus through a syringe with 18 guage needle during consolidation period. To assess the influence of PRP on the mineralization process in distracted callus, occlusal and OPG are taken during post distraction period at bi-weekly intervals until corticalisation of even one of the cortices are visualised.
Results
Out of the six patients included in study, the maximum mineralization after injecting PRP was observed in 5 patients at 2 weeks and in the remaining one patient at 4 weeks post injection as against 12 weeks without PRP.
Conclusion
Platelet-rich plasma enhances bone regeneration in distraction osteogenesis. It has a favourable effect on osteoblast-like cells, increases trabeculae bone volume in significant amount. The present study demonstrates the effect of platelet-rich plasma in accelerating the mineralization content of new bone regenerate following distraction.

EP-OD46
Anterior Maxillary Distraction (Amd) In Cleft Palate Patient With Maxillary Hypoplasia

Rajendra Prasad

Abstarct
Anterior maxillary distraction is a method of gradual bone distraction has been advocated as a viable alternative for large maxillary advancement with improved results over conventional orthognathic surgery Here with we present two cases AMD in cleft palate patients with retrognathic maxilla treated with anterior maxillary distraction with 1 year follow up.

EP-OD47
Modifications of BSSO

Sheetal Purohit

Rajasthan Dental College and Hospital

Abstract
Bilateral sagittal split osteotomy (BSSO) is the most common orthognathic surgical procedure. The bilateral sagittal split osteotomy is an indispensable surgical procedure for correction of lower jaw deformities. Indications for bilateral sagittal spilt are many including horizontal mandibular excess, deficiency and asymmetry. It is procedure of choice for mandibular advancement and mandibular set back of small to moderate magnitude. The basic design of the sagittal split surgical procedure evolved very quickly. The procedure has undergone numerous modifications over time. These modifications decreased post-operative swelling, hemorrhage, and manipulation of the neurovascular bundle. However, the location of the lateral osteotomy cut for BSSO varies according to the surgeon's preference, and no consensus has been reached regarding the ideal location from the perspective of biomechanics. The present poster is about various modifications of the bilateral sagittal split osteotomy.

Reconstructive Surgery (CODE-EPRS)

EP-RS1
A Neo Condyle-Ramal Unit Formation With Costochondral Graft After Segmental Resection Due To Ameloblastoma-A Case Report

Priyanka. Rana

J. S. S Dental College and Hospital

Abstract
Ameloblastoma is a true neoplasm of odontogenic epithelium, representing about 1 % of all oral ectodermal tumours and 9 % of odontogenictumours.According to the World Health Organization, ameoblastomas can be classified into four groups: 1) solid/multicystic, 2) extraosseous/peripheral, 3) desmoplstic, and 4) unicystic.A unicysticameloblastoma is a rare variant of ameloblastoma, accounting for 6–15 % of all intraosseousameloblastomas and was first described by Robinson and Martinez in 1977. Unicysticameloblastoma affects young population with a slight male predilection and frequently originates form the posterior mandible. In ourstudy, we present a case of a 5 year old male patient who reported to us with the complaint of swelling in the left mandibular region. For which incisional biopsy was done and was reported as unicysticameloblastoma of mural variant.hence the patient was planned for segmental resection of left body of the mandible followed by reconstruction with costochondral graft. Result:at a long term follow up of one year 3D CT scan shows a well formed condyle, coronoidprocess, ramus and body of the mandible on the left side, with a mouth opening of 35 mm. Conclusion:We conclude that costochondral graft re-establishes the vertical height of lower face & premorbid occlusion with excellent aesthetics and also allows for dynamic growth of a new condyle.

EP-RS2
Sensate Free Flaps In Oral and Maxillofacial Surgery: Making Sense

Pareedhi, Nageshwar Iyer

MM College of Dental Sciences and Research, MM University

Abstract
Oral and maxillofacial reconstructive surgery has witnessed several advancements in the last few decades. Microvascular free tissue flaps have a played a major role in reconstruction after tumour ablative surgeries of the oral and maxillofacial region. The aim of reconstruction is to adequately remove the tumour, ensure uneventful wound healing and provide satisfactory function and cosmesis. While all these objectives are achieved, there is relatively less focus on sensory rehabilitation of the recipient site. Sensitivity is an essential element of customary oral function. In light of this, this poster aims to discuss the microvascular free flaps which are potentially sensate; their advantages and disadvantages; success and failure rates in regaining sensation and their relative donor site morbidities.

EP-RS3
Microvascular Surgery—A Boon For Head and Neck Reconstruction

Priyanka Mann

SGT Dental College, Hospital and Research Institute

Abstract
Microvascular reconstruction surgery involves the transfer of autogenous vascularised tissue to reconstruct extensive soft and hard tissue defects of orofacial region. Microvascular reconstruction is now a days considered as gold standard for reconstruction of such defects. This involves harvesting of autogenous vascularized tissue with its pedicle and transferring to the recipient site using microvascular anastamosis. Vascularised flap is preferred over non-vascularised flap as they carries lot of advantages. Here we are presenting 4 cases of vascularised flap operated in Department of Oral and Maxillofacial Surgery of SGT Dental College and Research Institute. In three cases free fibula grafts and in one case free radial forearm flap was used for reconstruction of defects caused because of resection of benign and malignant tumours and tissue loss because of Road traffic accidents. Patients have been followed up for mean period of 2.4 years. In all cases graft has taken up well after restoring the defects caused due to various reasons and future planning will be done for placement of implants for rehabilitation of all the patients.

EP-RS 4
Tooth As A Bone Graft Material

Jatin Dhingra

Himachal Institute of Dental Sciences

Abstract
In the clinical field of bone reconstruction, the use of autogenous bone as a graft material is the gold standard. However, this is associated with inherent problems of donor site morbidity and other surgical complications. With successful extraction of growth factors and bone morphogenic proteins (BMPs) from mammalian teeth, many researchers have supported development of a bone substitute using tooth-derived substances. Some studies have also expanded the potential use of teeth as a carrier for growth factors and stem cells. Based on the potentials of osteoinduction and osteogenesis through growth factors in tooth and similar histogenesis between tooth and bone, a novel bone graft material is developed utilizing the inorganic and organic components of an extracted tooth. Indeed, autogenous tooth bone graft material (AutoBT; Korea Tooth Bank Co., Seoul, Korea) has been developed from an extracted tooth. A sound third molar tooth is assigned to be extracted from the patient. With fabrication and demineralization process, AutoBT material is made from the extracted tooth. This AutoBT is grafted back in the bone defect where guided bone regeneration is necessary in minor oral surgeries.

EP-RS 5
Mandibular Continuity Defect Reconstruction Using Non Vascularised Iliac Crest Bone Graft & Titanium Plates-A Study of Five Cases

Vinay Rana

R.Ahmed Dental College & Hospital, Kolkata

Abstract
Mandible defines the contour of lower third of the face. Deformity due to mandibular defects cannot be hidden by clothing. Reconstruction of mandibular defects caused by trauma, tumor resection, and infection is the most challenging task faced by Oral & Maxillofacial surgeons. Mandible plays a major functional role in addition to the aesthetic significance. Mandible has role in airway protection & support of the tongue, carries lower dentition for occlusion with the opposite arch, permitting mastication and speech. Therefore the aim of mandibular reconstruction is not just to establish continuity of mandible but to correct both functional & cosmetic deformity. There are a variety of reconstructive options like Autografts (non-vascularized bone grafts, vascularised pedicled bone grafts, free vascularised bone grafts), Allografts, Alloplastic implants. Non vascularised free bone grafting was the first method of reconstructing mandibular defects and was initially reported by Bradenheuer as early as 1881. In 1971, Conley introduced the pedicled Osteomyocutaneous flaps. With the advent of Stainless Steel & Titanium reconstruction plates in the 70's and 80's, the reconstruction option using these materials increased. In 1980, the popularity and increased utilization of vascularised free tissue transfer revolutionised mandibular reconstruction. But vascularised free tissue transfer requires specialized equipment & expertise and hence not practiced at all centres. Presenting here a poster on, results of study on primary mandibular reconstruction with iliac crest bone graft titanium reconstruction plate. Five patients were selected for primary reconstruction of the mandibular continuity defect after resection for benign jaw tumors. The results showed success in four cases, but in one case the plate had to be removed due to plate exposure. In another case, a small part of the plate was exposed extraorally which was covered by advancement flap from neck successfully.

EP-RS 6
Facial Feminization Surgery—Sculpt A Confident Face

Priya Govalkar, Meena Vora

Y. M. T. Dental College & Hospital

Abstract
Facial Feminization Surgery (FFS) encompasses a series of surgical techniques derived from Plastic & Craniomaxillofacial Surgery to soften facial features that are generally perceived as being more masculine mainly in patients diagnosed with gender dysphoria. Emphasis has been placed on the significance of this treatment for the patients self esteem & confidence. FFS is for anyone who wishes to soften or harmonize the underlying structure which gives shape to their face. FFS includes various bony & soft tissue procedures such as Forehead recontouring & browlift, Rhinoplasty, Cheek, chin & lip implants, Liplift, Jaw contouring, Chin contouring etc. The procedures are utilized to feminize the face, often involving sculpture & contouring of facial skeleton. The set of surgical procedures performed to reshape the facial bone & give them feminine proportions is called Facial Feminization Surgery. Ultimately, the goal is to reduce certain exaggerated features for an overall more balanced feminine look.

EP-RS 7
Cosmetic Reconstruction of Nose With Composite Graft -A Case Report

Sanjeev Kumar, Sukumar Singh, Kumar Rakshak Anand Puneet Bansal

I. T. S -CDSR, Muradnagar, Ghaziabad

Abstract
Graft selection remains a problem in nasal reconstruction, where the use of autologous cartilage still provides the best resistance to infection and a low degree of resorption. Numerous cartilage grafts with varying shapes and sizes have been described for reconstruction during rhinoplasty. Donor sites include the nasal septum, the conchal cartilage and the costal chondral cartilage. Most important problems

considering the choice of reconstructive technique, besides underlying pathology and expected result, include: long-term stability, donor morbidity, tendency to infection and extrusion of the implant and its resorption. Conchal graft used for reconstruction of the alar margin provides a suboptimal result. In this poster I will be presenting a case report of a patient with post-traumatic nasal deformity of left ala which was cosmetically reconstructed with cartilage from root of the helix. The surgical and post-operative points to be taken into consideration for successful grafting are discussed.

EP-RS 8
Buccal fat pad in reconstruction of Oral & Maxillofacial defects

Sanjeev Kumar, Sukumar Singh, Kanika Singh

I. T. S-CDSR, Muradnagar, Ghaziabad

Abstract
Buccal Fat Pad (BFP) is used as a versatile pedicled graft or a free graft for the closure of small to medium facial defects. Physiologically, it is a specialized type of fat termed as syssacosis, a fat that enhances intermuscular motion. Facial defects for reconstruction include oronasal and oro-antral communications following dental extraction, surgical defects following tumour excision, excision of leukoplakia and submucous fibrosis, primary and secondary palatal clefts and as an interpositional material in TMJ Ankylosis. It has an excellent blood supply and causes minimal donor site morbidity and is easily accessible. Studies suggested that owing to favorable anatomic location, high vascularity, ease of handling, and low failure rate, the BFP has become the flap of choice for reconstruction of various oral defects. In this poster, I will be discussing the uses of buccal fat pad as an interpositional material in cases of TMJ ankylosis, palatal fistula, oro-antral communication, malar prominence and in leukoplakia.

EP-RS 9
Osteoradionecrosis of Mandible—A Case Report

Sujata Mohanty, Cathrine Diana

Maulana Azad Institute of Dental Science, New Delhi

Abstract
Osteoradionecrosis is a serious complication of radiation therapy. Due to the increased use of radiation therapy and combined chemotherapy-radiation therapy regimens in treatment of head and neck malignancies, it is anticipated that osteoradionecrosis will continue to be an important clinical problem. The classic sequence in the pathogenesis of osteoradionecrosis of the jaws has been accepted as radiation, reduced vascularity, trauma, and infection. Osteoradionecrosis of the mandible is an ischemic necrosis due to radiation-induced obliteration of the inferior alveolar artery, while revascularization by branches of the facial artery is disturbed by radiation-induced vascular disease and periosteal damage. The most vulnerable part of the mandible is the buccal cortex of the premolar, molar, and retromolar regions. Marx staging and the HBOT treatment of osteoradionecrosis became the standard for planning the treatment of osteoradionecrosis. This presentation deals with a case of stage III osteoradionecrosis of mandible managed with a combination of procedures including ORIF, local advancement flap, HBOT and PMMC.

EP-RS10
The Versatility of Temporalis Myofascial Flap In Reconstruction of Maxillary Defects

Gopal Krishnan, Venkatesh Anehosur, Nikhil Harish K

SDM College of Dental Sciences and Hospital

Abstract
Temporalis myofascial flap holds great promise for the reconstruction of various defects of the maxillofacial region. The dependable blood supply through the middle and deep temporal arteries, proximity to the maxillofacial region and its fanned out nature permits the surgeon to use this flap for the reconstruction of various maxillofacial defects and even as an interposing tissue. Methodology: Patients who underwent temporalis myofascial flap reconstruction following resection of the various maxillary defects from the year 2005 to 2015 were evaluated and analysed. This poster highlights the techniques of harvesting the flap and reconstruction of the defect with associated donor site and recipient site complications. Results: The technique provided a safe and rapid solution for intraoral reconstruction. In all patients the viability of the flap was maintained with no evidence of total or partial flap necrosis. Conclusion: The temporalis myofascial flap proves to be simple, reliable and versatile flap for reconstruction of moderate to large sized maxillary defects, without any significant esthetic or functional donor site morbidity.

EP-RS11
Tissue Expanders

Jagadish Chandra, Sujesh Viswanathan

Yenepoya Dental College

Abstract
Tissue expansion in its natural ways had fascinated man from prehistoric times itself. But tissue expansion for medical purposes was first tried and reported only in the early half of twentieth century. Presently the principle of tissue expansion is being used in reconstruction of many hard and soft tissue defects of larger dimension,

which were previously regarded as great challenge for maxillofacial and plastic surgeons. Making use of the viscoelastic nature of the skin, considerable amount of tissue expansion based tissue engineering is possible in the maxillofacial region.

EP-RS12
Autogenous Dorsal Reconstruction: Maximizing The Utility of Diced Cartilage and Collagen

Sanjeev Kumar, Vijay Mishra, VidhiRrathi, Yashmi Jaiswal

I. T. S CDSR

Abstract
The problem of reconstructing the dorsum of the nose is complex and a source of frustration for both patients and surgeons. Dorsal deficiencies due to various aetiologies and the need for dorsal contouring cause the plastic surgeon to look to time-honoured techniques such as osseocartilagenous rib grafts while also searching for other options that may be less technically challenging. Diced cartilage wrapped with deep temporal fascia is just such a method to achieve reliable dorsal reconstructions. In Asians, nasal dorsal and tip augmentation procedures are usually performed at the same time, and most dorsal augmentations use implants. In this poster I will be presenting a case report of a patient with depressed nose, from birth which was reconstructed with a rib cartilage and some diced cartilage which was wrapped in collagen membrane and placed on the dorsum of nose.

EP-RS13
Split Apart To Create A Part

Saurabh Singh

Faculty of Dental Sciences, MSRUAS, Bangalore

Abstract
Distraction osteogenesis is a biomechanical process of regenerating bone and adjacent soft tissue. Osteogenesis occurs by gradual and controlled traction of surgically separated bone segments. Distraction osteogenesis is indicated in correction of deformities developing due to post-traumatic growth disturbances, post-surgical discrepencies with the use of various distractors. There are 5 sequential steps such as osteotomy, latency, distraction, consolidation, remodelling and 3 fundamental phases such as latency, distraction and consolidation phase. During these phases, 4 distinct areas and stages are observed histologically within the gap to the edges of bone. Latency phase starts from osteotomy to start of the distraction, during which soft callus is formed and the initial clotting converts into granulation tissue. It lasts from 0 to 7 days. Distraction phase starts with application of traction to the transported bone fragment and commencement of formation of new immature woven bone and parallel fibered bone. It lasts from 1–2 weeks. The success chiefly depends on rate and frequency of distraction. Consolidation phase allows the maturation and corticalization of the regenerated bone. Time required is twice as long as time required for activation. This poster highlights biological aspects viz histological changes occurring during distraction osteogenesis.

EP-RS14
Microfat Grafting—An evolution of the art

Ramdas Balakrishna Shetty, Rachita Bahety

K. L. E Institute of Dental Sciences Bangalore

Abstract
Autologous fat graft, by virtue of its volumetric qualities and its action on skin trophicity can be considered as a gold standard implant. It consists of harvesting of refined fat tissue using a multiperforated cannula with holes of 1 mm. Benefits of microfat grafting over conventional technique are: Minimally invasive technique, Higher surface/volume ratio of fatty pieces of tissue in lipoaspirates, Injection in inextensible or fibrotic spaces, Filling of different layers can be achieved, Maintains a normal histologic structure. The main indications for microfat grafting are: Pathologies that require reshaping of small missing superficial reliefs such as superficial scars, skin grafts, sclerodermia. Examples of areas that are successfully treatable but not limited includes temples, forehead, brows, glabella, upper eyelid lower eyelid cheeks, tear trough, midface, lips, perioral, nasolabial crease, geniomandibular groove, jawline, chin crease, submental crease and chin areas. The aim of micro-injection of adipose tissue is to use microcannulae that enable transfer at the subdermic level or in the almost inextensible fibrotic tissue.

EP-RS15
Various Modalities For The Treatment and Management of Maxillary Defects

Satyajit Dandagi, B C Sikkerimath, S S Gudi, Girish, Suma, Beemappa, Asha, Vinod, Thejaswini B L

PMNM Dental College and Hospital, Bagalkot

Abstract
Maxillary reconstruction is still an evolving art when compared to the reconstruction of the mandible. Tumour ablative surgery and trauma to the midfacial and maxillary complex involves structures integral to phonetics, deglutition and mastication which makes reconstruction both difficult and controversial. Many free flap donor sites have been described for reconstruction including the fibula, scapula, radial forearm, rectus abdominus, iliac crest and lattissimus dorsi. Maxillectomy prosthetic rehabilitation with a maxillary obturator prosthesis minimizes leakage of oral fluids into the nasal cavity, improves deglutition by preventing food bolus impaction into the surgical site, improves masticatory function and esthetics by replacing teeth removed during the surgery and improves speech by allowing separation between the oral and the nasal resonance and minimizing hypernasality. OBJECTIVE: Loss of all or a part of the maxilla as a result of tumour ablation or trauma has both functional and esthetic consequences. The basic objective of the reconstructive surgeon is to attempt to replace like tissue with like tissue. C0NCLUSION: The maxillary reconstructive surgery is complex and involves separation of the nasal and sinus cavity from the oral cavity and support to the orbital contents and restoration of facial contour. Various types of maxillary defects can be reconstructed successfully using different microvascular free flaps. The procedure of rehabilitation is

challenging despite the availability of several flaps and the skills of the prosthodontist.

EP-RS16
Nasolabial Flap Reconstruction In Intra Oral Defect

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Abstract

Introduction

Numerous methods have been advocated for the reconstruction of oral defects. sometimes the size of the defect and the age and medical status of the patient may not permit extensive procedures. In such circumstances the nasolabial flap proves to be highly advantageous as it is an excellent source of local tissue to reconstruct full thickness defects, relatively easy and short operative procedure compared to other reconstructive techniques, and is accompanied by minimal aesthetic deformity of the donor site.

Objective

The purpose of the study was to evaluate the outcome of intraoral reconstruction, using the nasolabial flap in terms of post-operative effects on speech, temperature sensation, mastication, deglutition and aesthetic result.

Material and method

Four patients reporting to the department of oral and maxillofacial surgery of P. M. N. M. Dental College and Hospital, Bagalkot for the treatment of various intraoral conditions such as oral submucous fibrosis, oro antral fistula and carcinoma of the floor of the mouth underwent resection followed by reconstruction with a unilateral nasolabial flap. Post-operatively the patients were evaluated for esthetics, speech and oral continence and effects on mastication.

Conclusion

The nasolabial flap is a valuable alternative for the reconstruction of small to moderate sized defects of the oral cavity particular in geriatric and medically compromised patients.

EP-RS17
Microvascular reconstruction of jaws-with free fibular flap

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Abstract

Background

The face is a complex meshwork of skin, muscles and underlying bone. Occasionally facial deformities involves loss of one or more original facial tissues. The greatest challenges to reconstructing these deformities are to restore the aesthetics and functions.

Objective

To restore the defects of jaws and restore primarily the function and aesthetics.

Method

The technique involves vascular induction of transplantable tissue by implanting a definite vascular pedicle to donor tissue and allowing sufficient time for the donor tissue to assume supply from transplanted vessels. The donor tissue can then be harvested and transferred on the implanted vessel as vascular carrier which can be anastomosed to recipient vessel in facial region.

Results

Out of the three patients that were operated; all of them have presented with excellent aesthetics and functions.

Conclusion

The microvascular facial reconstruction procedures have significantly revolutionised the function and aesthetics of patients.

EP-RS18
Temporal Island Flap In The Reconstruction of Upper Eyelid

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Abstract

Eyelid defects secondary to trauma, burn injuries, or ablative surgeries require challenging reconstructive procedures. Different eyelid reconstruction techniques have been described worldwide such as Mustarde's lid switch flap, Cutler Beard reconstruction, Fricke's flap, Lateral Temporal Flap and Midline Forehead Flap, Free mucous membrane graft and Tarsoconjunctival flap. Tempoal island flap for eyebrow reconstruction after burn injuries and tumor resection has been acknowledged by many surgeons. The complex anatomy of the temporal superficial fascia and its vascularization may inhibit the widespread use of this flap by reconstructive surgeons. However, experience remains limited on its use for posttraumatic eyebrow reconstruction. In this case report we present a case of post traumatic upper eye lid defect reconstruction using Temporal Island Myocutaneous Flap.

Objective

This case report outlines the treatment for upper eyelid reconstruction using temporal island flap and the way to harvest the temporal island flap.

Methodology

A coronal incision was carefully marked away from the path of the superficial temporal artery. The thin Superficial Temporal Artery, including the island scalp flap, was identified and carefully elevated toward its axis of rotation. Temporal Island Flap was rotated to the area through a subcutaneous tunnel between the base of the pedicle and the eyebrow defect.

Results

During the 24-month follow-up period, no complication was seen and a satisfactory aesthetic result was achieved Conclusion: The Temporal Island Flap represents a useful technique and an alternative for reconstruction using grafts. This technique was adequate for reconstruction of the traumatic avulsion of upper eyelid.

EP-RS19
Indispensable adjunct for reconstruction: Tissue Expanders

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Abstract

Indispensable adjunct for reconstruction: Tissue Expanders Background Reconstructive maxillofacial surgery is a dynamic discipline

in OMFS that relies on traditional surgical skills as well as surgical innovations in order to cope up with the challenging management of congenital, acquired defects and residual defects in OMFS. Tissue expansion in its natural ways had fascinated man from prehistoric times itself. It was first tried and reported only in the early half of twentieth century. Presently the principle of tissue expansion is being used in reconstruction of many hard and soft tissue defects of larger dimension, which were previously regarded as great challenge for maxillofacial and plastic surgeons. Materials and methods this poster will throw light on the indications and techniques of tissue expanders in OMFS, it will also highlight the advantages and various complications of expanders.poster will give information about the biological effects and how does tissue expansion yield extra tissue. Result and conclusions The observation that living tissue respond in dynamic fashion to mechanical forces This technique has improved the ability of the surgeon to replace lost or surgical excised tissue with neighbouring tissue of similar colour, texture, sensation and thickness.

EP-RS20
Platelet Rich Fibrin (PRF) In Regeneration of Hard and Soft Tissue Defects

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Abstract
Innovations in the concept of tissue engineering have brought about a drastic improvement in the healing process of tissues. The pivotal goal in maxillofacial tissue regeneration is to reconstruct the post-surgical defects. For wound healing to occur efficiently, platelets play a vital role. Autologous Platelet Rich Fibrin (PRF) is a fibrin matrix in which platelets, cytokines, growth factors and cells are trapped and released gradually. It acts as an organized resorbable membrane which efficiently directs stem cell migration into the wound, thus stimulating angiogenesis, migration, proliferation and differentiation of mesenchymal stem cells into tissue forming cells and accelerates the healing and regeneration process at the healing site. This poster, through a series of cases, depicts PRF as a successful soft and hard tissue biofuel in areas of post surgical lip, tongue, buccal mucosa, alveolar ridge and alveolar socket defects

EP-RS 21
Osteointegrated Implants for Auricular Alloplastic Reconstruction

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Abstract
Background
Craniofacial prostheses can be used as artificial substitutes for facial defects. They may be fixed anatomically (to already existing structures), mechanically (to spectacle frames), chemically (using adhesives), or surgically (to osseointegrated titanium implants). Osseointegrated implants have acquired an important role in the prosthetic rehabilitation of patients with craniofacial defects. With the existing extraoral implant systems, prostheses may be securely anchored to the bone regardless of size and location of the defect.
Objective
This poster presents a clinical case and discusses indications and advantages of the osseointegrated implant technique for retention of auricular prostheses.
Methodology
A patient received auricular implants for craniofacial rehabilitation of an ear. The time taken for osseointegration of the temporal bone was three months. After fabrication of the implant-retained auricular prosthesis, the patient was monitored for 12 months.
Results
The clinical parameters evaluated showed good postoperative healing, healthy peri-implant tissue, good hygiene and no loss of implants. Good hygiene combined with thin and immobile peri-implant soft tissues resulted in minimal complications.
Conclusion
The surgical technique for rehabilitation using implant-retained auricular prostheses seems to be simple. It is associated with low rates of adverse skin reactions and long-term complications. Prostheses anchored by osseointegrated implants seem to provide better retention than do prostheses supported on spectacle frames, less risk of discoloration through the use of adhesives and better esthetic results. Craniofacial implant integration appears to be site-dependent; increasing age affects osseointegration in the temporal bone.

EP-RS 22
Methods of Mandibular Reconstruction

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Abstract
Mandible is most prominent bone of the Cranio-Maxillofacial region. Which makes it more prone to non-pathological injuries i.e. trauma due to RTA, fall etc. Oro-mandibular reconstruction need also arises due to pathological disorders of mandible. Involving resection of benign tumor, malignant cancers, osteomyelitic or osteoradionecrotic mandible. This remains challenge for oral and maxillofacial surgeons today. Objective: Reconstruction of mandible by using various treatment modalities and their merits and demerits. Methodology: This can be achieved by the use of vascular flaps such as free fibula flaps, illiac crest osteocutaneous flaps, scapular free osteocutaneous flaps, radial-forearm osteocutaneous flap, osseointegrated implants-implant borne dentures. Recent advances such a tissue engineering approach to repair bony defects, scaffolds ranging from collagen spores to autologous autoclaved bone with BMP-2 which facilitate osteogenic differentiation of implanted cells. Result: This poster discusses various modalities of mandibular reconstruction & highlights on newer modalities with emphasis on endomodular prosthesis, distraction osteogenesis & vascular flaps.
Conclusion
This effectively restores function and esthetics of oro-mandibular region allowing patient to return to society with confidence.

EP-RS 23
Free Flaps: New Era of Reconstruction of Oral and Maxillofacial Defects

Mahesh Chander and Amit Gaur, Kiran Kumari

Sardar Patel PGI of Medical & Dental Sciences

Abstract

Background

Reconstruction of large maxillofacial defects is a challenging task for oral and maxillofacial surgeons since decades. Various Free Flaps have been advocated for reconstruction of soft and hard tissue defects of maxillofacial region. The choice of the flap to be used determines the probability of its success.

Objective

The objective of this poster is to enlighten the different free flaps options (Rectus Abdominis, Free Transverse Rectus Abdominis Myocutaneous, Radial Forearm, Jejunum, Latissimus Dorsi, Fibula, Scapula, Iliac Crest etc.) available for reconstruction of oral and maxillofacial defects.

Methodology

Various surgical techniques have been suggested for reconstruction of large Oral and Maxillofacial Defects like, tumour, malignancies of maxillofacial region. The type and size of defect determines the variety of free flap required and surgical technique to be employed.

Results

Different Free Flaps available for reconstruction of oral and maxillofacial defects have their own advantages and disadvantages. Type of the Oral and Maxillofacial Defect dictate the Free Flap to be used.

Conclusion

Harvesting of Free Flap and its insertion demands expertise skill and a thorough knowledge of Oral and Maxillofacial region along with good postoperative care and long term follow up for successful survival and longevity of the flap.

EP-RS 24
Comparison of Reconstruction of Surgical Defect In Oral Submucous Fibrosis Cases With Nasolabial Flap and Buccal Fat Pad Along With Collagen Sheet

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Sardar Patel Pg Institute of Medical & Dental Sciences

Abstract

Background

There are various techniques of reconstruction after fibrotomy in OSMF. Reconstruction can be done through various methods like skin grafts, buccal fat pad, collagen, nasolabial flap, tongue flap, microvascular flaps or other dressing materials.

Objective

Comparison of reconstruction of the musculo-mucosal defect by facial artery based nasolabial flap with buccal fat pad along with collagen sheet.

Methodology

Surgeries of OSMF and closure done with extraoral nasolabial flap after rotating it intraorally in one group. In other group buccal fat pad was positioned into musculo-mucosal defect along with collagen sheet and suturing was done.

Result

Nasolabial flap poses cosmetic problem but post-operative mouth opening is better and no relapse is observed whereas in BFP with collagen is easier and less complicated but poses certain complications like more chances of refibrosis and relapse.

Conclusion

Nasolabial flap should be advocated in severe OSMF cases and old patients to exclude cosmetic problems where as BFP with collegen sheath should be advocated in mild to moderate cases of OSMF and in patients concerned with cosmetics.

EP-RS25
Nasolabial Flap-its Use in Reconstruction of Small To Moderate Size Intraoral Defects

Biswajit Das

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Abstract

Nasolabial flap is an excellent flap used in reconstruction of intraoral defects. Poster contains a case of 60 yr old male with scc of anterior alveolar mucosa and adjoining labial mucosa, lesion size-4*3 cm.defect reconstructed with unilateral single stage nasolabial flap.

EP-RS26
Modalities of condylar unit reconstruction in Temporomandibular joint (TMJ) ankylosis

Tushar Deshmukh

AFMC

Abstract

Temporomandibular joint (TMJ) ankylosis is one of the most common pathologies afflicting the facial skeleton but it is also the most overlooked and under managed problems. The TMJ forms the cornerstone of craniofacial integrity hence its ankylosis affects the growth and development of jaws and occlusion impairment of speech, difficulty in mastication, poor oral hygiene, rampant caries and acute compromise of airway pose a severe psychological burden on the patient. Treatment of bony ankylosis of the TMJ presents a significant challenge to the surgeon. Complex and distorted anatomy with loss of anatomical landmarks makes this type of surgery particularly difficult, carrying significant risks of injury to vessels, nerves, and middle cranial fossa. There are usually 2 steps in the treatment of TMJ bony ankylosis. The first step is to resect the ankylosis, creating a critical size gap that is wide enough to prevent further recurrence of bone

growth. The second step is to reconstruct the TMJ with autogenous grafts or alloplastic materials. Different modalities are present for reconstruction of ramus condylar unit which we have tried to represent in this poster.

EP-RS27
Role of Stem Cells In Oral and Maxillofacial Surgery

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Abstract
Cells with unique capacity for self-renewal and potency are called stem cells. With appropriate biochemical signals stem cells can be transformed into desirable cells, stem cells can give rise to one and sometimes many different cell types. They are found in almost many of the multi cellular organisms and are characterized by the ability to renew through mitotic cell division while maintaining the undifferentiated state. The possible applications of stem cells are replacement and repair of tissues and organs. Regeneration of oral and maxillofacial structures can be carried out using stem cell therapy. Stem cells can be useful in the regeneration of bone and to correct large craniofacial defects due to cyst enucleation, tumor resection, and trauma. Emphasis has been given to the possibilities of stem cell therapy in the oral and maxillofacial region including regeneration of tooth and craniofacial defects. The powerful combination of stem cell biology with multiscale engineering tools has advanced the field of bone tissue engineering to an unprecedented level with widespread in vivo applications for the healing of craniofacial bony defects, segmental bony defects.

EP-RS28
Comparision Between Buccal Fat Pad Graft and Collagen Membrane Graft In Surgical Reconstruction of Buccal Mucosal Defects In Oral Submucous Fibrosis

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Abstract
Aims and Objectives
The purpose of the study was to compare the usefulness and effectiveness of collagen membrane graft and buccal fat pad graftgical in surgical reconstruction of buccal mucosal defects in oral sub mucous fibrosis. The inter incisor distance was used as an objective criteria to measure the outcome response at time interval of 1st week, 1st month, 3rd month, and 6th month post operatively.
Materials and Methods
14 cases with grade 3 and grade 4 OSMF were chosen. 7 patients were selected for reconstruction with buccal fat pad (group1) and 7 patients planned for reconstruction with collagen membrane (group 2) after surgical resection of fibrous bands.
Results
Comparision was made between group 1 and group 2 with respect to pre-operative spontaneous inter incisor distance, Forced intra operative inter incisal distance, after 1‘ week, after 1 month, after 3 months and after 6 months mouth opening. The mean interincisal distance was 39.0 mm in case of BFP and 33.3 mm in case of collagen membrane after 6 months. The overall increase in interincisal distance for group 1 after 6 months was 150.46 % whereas for group 2 it was only 133.0 %.
Conclusions
Based on the inter incisor distance at 6 months post operatively, proximity to the recipient site, excellent function without deterioration of aesthetics and little post-operative morbidity we concluded that buccal fat pad is a better choice for the reconstruction of buccal mucosal defects in management of OSMF

EP-RS29
Temporoparietal Galeal Flap for Reconstruction of Buccal Mucosa: A Case Report

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Abstract
Background
The pedicled/free temporoparietal fascia has been used in many areas especially in head and neck reconstruction as it is thin, pliable and highly vascularised.
Objective
In this we aim to describe the surgical technique required to utilize the pedicled temporoparietal fascia flap for repair buccal mucosa and to report our experience with this reconstruction proceedure.
Methodology
In this we have discussed a case of 60 year old female with lesion in the left buccal mucosa which was diagnosed to be squamous cell carcinoma. The treatment plan includes wide resection followed by reconstruction. Temporoparietal fascia flap based on superficial temporal vessels was raised and transposed to the mouth through a tunnel under the zygomatic arch and the defect was repaired.
Results
There was no flap loss and the reconstructive goal was achieved in this case.Donor Site scar was hidden by hair growth.
Conclusion
The advantage and minimal donor site morbidity of TPFF makes this flap a good choice in reconstructive procedure.

EP-RS30
Versatility and Effectiveness of Pedicled Buccal Fat Pad In Reconstruction of Intra-Oral Defects

Gaurav Singh, Amit Gaur, Ajita Dwivedi

Sardar Patel Post Graduate Institute of Dental and Medical Sciences

Abstract
Background
The use of buccal fat pad as a grafting source has gained popularity in the closure of intra-oral defects in the last quarter of this century.
Objective
Because of the ease of access, local availability and rich blood supply, its use in oral defects is an attractive concept.
Methodology
Various surgical techniques have been suggested for the closure of oral defects such as primary closure, buccal mucosal graft, split

thickness skin graft, allogenic graft, regional rotational flap and the distant flap. The type and size of defect determines the technique to be used.

Result

It provides 7Ã–4Ã—3 cm pedicled graft. Healing of the graft occurs in 2–3 weeks. It starts epithelializing in a week and epithelializes completely in 6 weeks. The color changes from yellowish white to red as the epithelialization proceeds.

Conclusion

Among the local flaps, buccal fat pad has no cosmetic hindrance (no extra oral scar) as it is nearer to intra oral defects, definite and is having a rich vascular supply, pliable and can be adapted to defects.

EP-RS31
Biomaterials For The Reconstructive Surgeries of Maxillofacial Region

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Abstract

The maxillofacial region is of utmost importance because of its vital functions and esthetics. Tissue loss or injuries in this region can have serious consequences to an individual's quality of life. The need for the reconstructive surgeries of this region is therefore required to restore the esthetics, functions and anatomical integrity. Reconstruction of maxillofacial bones and tissues has proven to be complex due to esthetic requirements and functional demands. These limitations have inspired for innovative techniques for bone bioengineering and development of reliable biomaterials. Biomaterials may be defined as those engineered materials used specifically for medical applications. The first generation of biomaterials was recognized more prominently between 1960 to 1970. The goal of the first generation was to achieve matching mechanical properties. While the second goal was biocompatibility. With this in mind, in the 1980 s, there was a progression towards the second generation of biomaterials that were more biologically-active or bioactive. The most recent paradigm shift has been toward cell and gene activating biomaterials: the third generation of biomaterials. These biomaterials can be combined as scaffolds with cells, growth factors or genetic material to trigger tissue regeneration. The recent advances in field of biomaterials have shown the possibility to design materials that can activate cellular processes and tissue formation solely by their intrinsic and 3D spatial properties. This poster presents a review of the past, present and future of biomaterials in maxillofacial surgery.

EP-RS32
Flaps In Maxillofacial Reconstructive Surgery—From Dusk To Dawn

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Abstract

The reconstruction of maxillofacial defects frequently presents a challenging dilemma for the surgeon. Recent advancements in micro vascular tissue transfer have increased the number of alternatives available for reconstruction. With these advances and the classic reconstructive options available, it is imperative that the surgeon weighs the risk and benefit to the patient undergoing various reconstructive procedures. A guiding principle in reconstructive surgery should be use of simplest approach that will adequately reconstruct the defect. Current techniques include reconstruction with prosthesis, local flaps, loco regional flaps and grafts, and a distant free tissue transfer. Many types of flaps have been described, of these, the flaps which have many advantages, including" the use of like tissue, the creation of a sensate flap, and minimal donor site morbidity can be considered. The reconstructive surgeon has a variety of options for reconstructing defects of the oral cavity and face. Functional and esthetic concerns, the size of the defect, donor site morbidity, and the surgeon^{TM}s level of experience are factors that influence the choice of a reconstructive technique. The poster presented here depicts various flaps that have been used as reliable and versatile techniques of head and neck reconstruction that most maxillofacial surgeons can easily use and incorporate into their reconstructive practice.

EP-RS33
Calvarial reconstruction choice of implant materials

Aravind A. Vijayan, Ravi V., Pramod Subash, Ushass P

Amrita Institute of Medical Sciences

Abstract

Background

Cranioplasty is the surgical technique used for correction of cranial vault defects. It provides functional and protective benefits along with cosmesis. Autologous bone graft, titanium, poly-methylmethacrylate (PMMA), ceramic and polyether ether ketone (PEEK) are the material that are used more commonly.

Objective

To evaluate various materials used for cranioplasty in regard to ease of use during surgery, post-operative complications and long term cosmetic outcome.

Methodology

A Retrospective analysis of patients who underwent cranioplasty procedures during the period July 2014 July 2015 was done.

Results

11 patients with cranial vault defects underwent cranioplasty with various materials. Solid Titanium (N = 4), Titanium mesh (N = 2), PMMA (N = 2), Hydroxy apetite cement (N = 1) and Autologous bone graft (N = 2) were used to reconstruct calvarium. Fabrication of Solid Titanium Implants required outsourcing unilke PMMA implants which were fabricated inhouse. Titanium mesh could be contoured on table preoperatively on RPT models and is used in small to moderate defects to maintain stuctural integrity. Autogenic bone grafts were used for small size defects. There were no long term complications noticed in the follow up period and had acceptable results.

Conclusion

Factors like cost and ease of fabrication, ease of use intra operatively and long term funtional and cosmetic outcome are the variables for consideration in choice of material for cranioplasty. This poster reviews the materials and techniques that are used in reconstructing cranial vault defects.

EP-RS 34
Applications of Stereolithographic models In Craniomaxillofacial surgery

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Amrita Institute of Medical Sciences

Abstract

Background

Diagnosis and treatment planing becomes a challenge in the reconstruction of severe craniofacial deformities. Achieving perfection in reconstruction of jaw defects with final goal of prosthetic rehabilitation could be a difficult propostion without surgical cutting guides and prebent and adapted plates.

Objective

Stereolithographic (STL) modelling is an advanced rapid prototyping technology that is widely utilised in the boimedical field. The purpose of this poster is to describe the use of STL models in Craniomaxillofacial Surgery.

Methodology

A retrospective overview of patients who required STL biomodelling for diagnosis and treatment planning at our institute during the period July 2014 July 2015.

Result

Total of 24 patients with various required STL models for diagnosis, precise treatment planning, benign pathology followed by reconstruction with fibula (N = 3), secondary reconstruction of maxilla (N = 2), posterior cranial vault distraction (N = 1), monobloc distraction (N = 1), Endoscopic assisted internal distractor placement (N= 1), Post traumatic deformity (N= 3), secondary reconstruction of mandible (N =1), malignant pathology of mandible (N= 1), cranial vault defect (N= 4), TMJ replacement (N = 1), craniosynotosis (N=1), Syngnathia (N = 1), Hypertelorism (N = 1).

Conclusion

STL model is a realistic replica of complex or rare dysmorphic craniofacial pathology, that can be an important tool right from diagnosis, treatment planing and execution to produce improved surgical outcomes. This poster showcases the advantages and uses of STL models in CMF surgeries.

EP-RS 35
Surgical Reconstruction of Temporomandibular Joint

Heena Sayed

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Abstract

In order to achieve functional and anatomical rehabilitation of the TMJ destruction, surgical reconstructive procedures are attempted. Many of these situations can be surgically treated with the patient's own autologous tissues. However, in some patients reconstruction is complex and the use of autologous tissues is unadvisable whereas reconstruction utilizing alloplastic materials may be an appropriate alternative.

EP-RS 36
Reconstruction of Atrophic Anterior Maxilla Using Autogenous Iliac- Crest Bone Graft

Shaliki Wadhera

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Abstract

Reconstruction of atrophic anterior maxilla using autogenous iliac-crest Bone Graft Resorption of the edentulous or partially edentulous alveolar ridge or bone loss due to periodontitis or trauma frequently compromises dental implant placement in a prosthetically ideal position. Therefore, augmentation of an insufficient bone volume is often indicated prior to or in conjunction with implant placement to attain predictable long-term functioning and an esthetic treatment outcome. In order to ensure successful osseointegration, stability and long term survival, the implant site should have sufficient bone quantity and quality. We document a 60 year old female with long standing loss of anterior teeth needing replacement. Examination revealed deficiency of volume of available bone in height and width. The atrophic maxilla was reconstructed by autogenous bone graft and fixed with miniplates and screws. The wound healing was uneventful and graft uptake was satisfactory.

EP-RS 37
Versatality of Temporalis Flap In Reconstruction of Various Defects In Maxillofacial Surgery

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Abstract

Introduction

The Temporalis muscle, with its anatomical origin in the skull and insertion in the coronoid process favours flap to rotate and cover defects both in upper and lower half of the face. Both the ends of muscle can be elevated at the same time, while maintaining the blood supply to the muscle. It thus can be harvested as a full thickness or a partial thickness flap owing to its rich vascularity.

Aim

To determine the versatility of temporalis flap in the reconstruction of various complex defects and reanimation of facial nerve.

Materials and methods

Temporalis flap was used in 32 patients for 1) Ankylosis as interpositional material, 2) OSMF, 3) post-ablative defects, 4) Facial reanimation. The length of the flap, blood loss during surgery and wound healing were recorded. The viability post-operatively was assessed by a non invasive ultrasound doppler.

Results

In all the cases, there was surface sloughing of the fascia and muscle mass in 7–10 days time following epithelisation of the sloughed surface in 3 weeks time. The success rate was found to be 98.4 %. Conclusion: On the basis of our experience with 32 cases, it is evident that the temporalis flap is a useful and versatile option. It provides

abundant tissue esthetic morbidity of the donor site. The major advantage is that it can be harvested from either its origin or its insertion and it can be used in combination with muscle along with galea and fascia.

EP-RS38
Human Bite—Oldest Weapon, Used In Modern Era

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Abstract
Human bite is relatively common but traumatic lip amputation due to human bite is not a common event. From the evaluation of the emergency room and public health records, it has been established that at least 20000 humans suffer bites from other humans each year. The victims are usually 20 to 30 years of age, predominantly male with the main cause as violence and aggressive sexual activity. The commonest area of involvement is upper extremity, breast, lips, cheeks, nose, ear, abdomen, thorax and genitalia. In present case a young male patient reported to the Department of Oral and Maxillofacial Surgery, Subharti Dental College, with the chief complain of bite injury on lower lip by his brother during inter personal violence, resulted avulsion of right 1/3 lower lip. The area was debrided carefully and all the prophylactic measures were given. Reconstruction of lower lip was performed with the aid of pedicled flap from upper lip (Abbe flap or Estlander flap) under GA. During immediate & late post-operative phase, patient recovered uneventfully with aesthetically, functionally and psychologically acceptable outcomes.

EP-RS 39
Comparision of Buccal Fat Pad With Nasolabial Flap Reconstruction In Surgical Management of Oral Submucous Fibrosis

A. Shravya

Kamineni Institute of Dental Sciences

Abstract
Background
Oral submucous fibrosis is a chronic debilitating disease chiefly characterised by the progressive reduction in the mouth opening. Relieving the trismus is the main stay of the palliative management of the disease.
Objective
To evaluate and compare the effectiveness of two reconstructive modalities, i.e. Nasolabial flap and Buccal fat pad, for the reconstruction of the defect in buccal mucosa, secondary to the resection of the fibrotic bands in oral submucous fibrosis.
Methodology
20 cases of oral submucous fibrosis (grade III and IV) with mouth opening less than 20 mm were selected 10 in each group. After surgical excision of the buccal fibrotic bands, reconstruction of the defect was done by NLF in 10 cases (i.e.; group I) and by BFP in 10 cases (i.e.; group II) All the patients were followed up for 6 months.
Results
The mouth opening, cheek flexibility, epithelization was similar in both the groups. Widening of the oral commissural was seen in group I and absent in group II.
Conclusion
Both NLF and BFP were versatile flaps in covering the oral defects. The advantage with NLF was that it can cover larger defects. But the disadvantage was widening of oral commissure, hair growth and extraoral scar, which were not seen in BFP. Though BFP flap is supple and soft, is devoid of these disadvantages, the drawbacks were that it covers only smaller areas.

EP-RS 40
Role of Buccal Fat Pad In Intra Oral Reconstruction

Abhishek Singhal

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Abstract
Background
The Buccal Fat Pad (BFP) originally described as an anatomic structure without any obvious function. During the past three decades, the BFP has become a well-established tool in oral and maxillofacial surgery for reconstruction of small to medium sized acquired or congenital soft tissue and bone defects in the oral cavity.
Objective
The aim of this poster is to review the Role of Buccal Fat Pad in Intra Oral Reconstruction.
Methodology
We used the pedicle buccal fat pad in the reconstruction of intraoral defects such as oroantral fistula, defect due to maxillectomy, buccal mucosal defects and for the closure of incised wound after surgical treatment of OSMF.
Results
The surface of the fat converted to normal mucosa and demonstrated stable healing without complications over a long-term period.
Conclusion
The findings support the view that the buccal fat pad is versatile, logical, convenient, and reliable method for the reconstruction of oral defects. Good vascularization, ease of access, and minimal donor site morbidity make it a reliable soft tissue graft.

EP-RS 41
Evolution of Platelet Rich Concentrates in Oral & Maxillofacial Surgery—An Insight

Anthony P. Sclafani, Abhishek V. Nandavar

M. S. Ramaiah Dental College

Abstract
Among the great challenges facing clinical research is the development of bio-active surgical additives regulating inflammation and increasing healing. The healing of hard and soft tissue is mediated by a wide range of intra and extracellular events that are regulated by signalling proteins. Understanding the entire process is still incomplete. However, it is known that Platelets play a major role in

haemostasis and wound healing, but their functions in regulation of immune response, wound healing, osteogenesis, and angiogenesis have only recently become the subject of extensive investigation. Platelet concentrates are currently used to improve healing with the presence of key growth factors such as PDGF-AB (platelet- derived growth factor AB), TGFÎ²-1 (transforming growth factor Î²-1) and VEGF (vascular endothelial growth factor), which are able to stimulate cell proliferation, matrix remodelling and angiogenesis. Numerous techniques of autologous platelet concentrates have been developed and applied in oral and maxillofacial surgery. Taking this into account PRP (Platelet rich Plasma) & its concentrates like PRF (Platelet Rich Fibrin) & PRFM (Platelet rich fibrin matrix) was used in various conditions on the face and in the oral cavity. Here we report a series of patients treated with these products.

EP-RS 42
Prevalance of Peronea Magna In Free Fibula Flap

Mukul Padhye, Suraj Bajoria

D. Y. Patil School of Dentistry, Navi Mumbai

Abstract
The free fibular osteocutaneous flap is a commonly used donor for reconstruction of mandibular defects. Vascular abnormalities and leg trauma are relative contraindications to the use of a fibular free flap. Peroneal arteria magna (PAM) is one such vascular abnormality that may preclude the use of the graft due to the high risk of lower-limb ischemia.
Objective
This study is to evaluate prevalance of peronea magna in free fibula flap surgery.
Methodology
30 consecutive patients (ameloblastoma) had undergone preoperative ct angiography for mandibular reconstruction from free fibula flap.
Result
Preoperative ct angiography was highly specific (100 %) and sensitive in mapping and visualizing perforators in the lower limb. There were hardly any flap failures after angio-ct, and operative findings always correlated perfectly with preoperative imaging. 1 out of 30 patients had peronea magna.
Conclusion
3.3 % of the cases had peronea magna which we did. In such cases we have to go for other alternatives.

EP-RS43
"Eyes Sculpturing With Canthopexy"

Shreyas Gupte, Yash Jethwani

Yerela Medical Trust's Dental College and Hospital

Abstract
Eyes Speak What The Lips Fear To Say. Estheticaly droopy eyelids make us look sleepy and can actually impair eyesight, while wrinkles and eyebags have an aging effect. Even in patients with midfacial injuries, telecanthus and /or dystopic medial canthi disturb the orbital symmetry and facial harmony considerably. Corrective surgery is esthetically demanding in such cases. Canthopexy is one such standard technique and less invasive that provides lateral canthal support without altering the lateral canthal tendon. Such support confers protection against lower eyelid retraction or ectropion or in patients with mild eyelid laxity. Other advantages include canthal tendon lacerations, traumatic canthus dislocation or lateral canthal displacement from periorbital tumors and vascular malformations and ability to excise more skin than is feasible without tendon fixation. As with all surgical procedures, there are risks, the potential post-operative complications with eyelid surgery could be abnormal scarring, excessive bleeding and tissue necrosis. Our eyes are probably the first thing that people notice about us. In patient who wants a better, younger looking appearance, canthopexy, at present, remains a main stay in oculoplastic surgery as it is that esthetic procedure which not only beautifies their eyes but also makes them more attractive and exotic.

EP-RS 44
Microvascular Free Tissue Transfer For Maxillofacial Reconstruction

Jayant Marya

Hitkarni Dental College and Hospital, Jabalpur

Abstract
Background
With the dawning of 1970's, ushered a concept of microvascular free tissue transfer which allowed the surgeons to reconstruct the maxillofacial structure after resective surgeries for oral and neck malignancies, various pathologies and severe traumatic injuries.
Objective
This poster aims to present two case reports of osseomyocutaneous and septocutaneous microvascular free flaps used for maxillofacial reconstruction after resection of ameloblastoma and carcinoma of buccal mucosa respectively.
Methodology
In the first case after resection of ameloblastoma of left mandible, the defect was reconstructed using osseomyocutaneous fibula free graft. In the second case, after excision of carcinoma of buccal mucosa the defect was reconstructed using septocutaneous radial forearm free flap.
Results
Both the cases showed satisfactory healing with good esthetic and functional results.
Conclusion
Ability to restablish blood flow by anastomaosis between donor and recepient vessels with microvascular free flaps has given a major boost to the reconstruction paradigms.

EP-RS 45
Use of Nasolabial Flap in the Management of Oral Submucous Fibrosis with immediate physiotherapy —A Case Report

K. C. Gupta, Micael Pragasam, Kunal Gupta

Modern Dental College and Research Centre

Abstract
Oral submucous fibrosis is a chronic debilitating disease associated with restricted mouth opening and poor oral hygiene. The treatment

aims at good release of fibrosis and to provide long term results in terms of mouth opening. Various local grafts have been used to cover the buccal mucosal defects after the fibrotic bands are released in oral submucous fibrosis. Successful use of inferiorly based nasolabial flaps in the management of oral submucous fibrosis is projected. A case of oral submucous fibrosis having a mouth opening of less than 2 mm was surgically treated. The procedure involved (1) bilateral release of fibrotic bands (2) measurement of intra-operative interincisal distance (37 mm achieved after release of bands) (3) covering the defects with inferiorly based nasolabial flap. Patient had post-operative physiotherapy immediately after operation, and was followed up regularly. Flaps healed without evidence of infection, dehiscence, or necrosis. Results were assessed by comparing the preoperative & post-operative maximum mouth opening. The inferiorly based nasolabial flaps provide reliable coverage of defects of the buccal mucosa and improves mouth opening.

EP-RS 46
Tissue Engineering In Oral and Maxillofacial Surgery

Shaswat Diwan, Hiren Patel, Haren Pandya, Hitesh Dewan, Bijal Bhavsar, Urvi Shah

Faculty of Dental Science, DDU, Nadiad, Gujarat

Abstract
The artificial generation of tissues, organs, or even more complex living organisms was throughout the history of mankind a matter of myth and dream. During the last decades this vision became feasible and has been recently introduced in clinical medicine. The interest and attention that this rapidly developing area has received are based on the vision that the growing understanding of tissue healing and the achievements of biotechnology will be of profound therapeutic relevance. Clinically, reconstructive surgery has arrived at a standard of care that allows for repair and restoration of the vast majority of tissues/organs with established techniques. The real challenge of tissue engineering in clinical treatment is the reduction of surgical morbidity by the application of biological signals or bio-artificial components cultivated from the patient's own cells, that can replace the lost body part or accomplish its repair without the need for autogenous tissue transfer. Initially, activities in this area were mainly focused on cell-based approaches aiming at the generation of tissue-like constructs by combining ex vivo expanded cell populations with various types of scaffolds. Today, the field of tissue engineering has expanded tremendously, in that not only cells and scaffolds but also growth factors, controlled release carriers, engineering of biomaterials and many other areas of basic and applied research are considered to be part of the field of tissue engineering.

EP-RS 47
Reconstruction of Upper Lip By Abbe's Flap

Geeti V. Mitra, Sarwpriya S. Bajaj

Sri Aurobindo College of Dentistry, Indore (M. P.)

Abstract
Lip defects occur as a result of various causes including trauma, infections, cancer or congenital deformities. Lip reconstruction poses a particular challenge to the surgeons as they lips are the dynamic center of the lower third of the face. The goals of lip reconstruction are both functional and aesthetic, and the surgical techniques should be chosen accordingly. Abbe's flaps have been a popular method of dealing with both upper and lower 1/3rd–2/3rd lip defects without involving commissure of mouth. Abbe's flap is a staged flap based on the labial artery. It is more commonly used as a lower lip flap transferred to the upper lip with both the central and lateral lower lip serving as a donor site. Advantage of the Abbe's flap is the ability to replace a vertical segment of both vermilion and cutaneous lip tissue. The defect is assessed and designed to be half as wide as the defect it allow for balanced upper and lower lip lengths after flap transposition. Here, we present two cases of upper lip defect in which Abbe's flap was successfully used for the reconstruction of these defects.

EP-RS 48
3D Model Reconstruction with 2d Imaging-It's Application in Transport Distraction

Dennis Vasanthkumar L

Meenakshi Ammal Dental College

Abstract
Background
The effectiveness of 3d models has immense benefits in reconstructive surgery, but its use in patients of low socio economic group is limited because of the costs involved in fabrication of stereolithographic models & CT imaging.
Objective
The objective is to select a 3D template with the help of panoramic radiograph and to avoid taking guidance from CT and Stereo Lithography models which are not cost effective.
Methodology
Three groups of panoramic radiographs were analysed GroupA-150 radiographs of pts undergoing orthodontic treatment. GroupB-50 radiographs of dry mandibles. Group C- radiographs of 10 pts with pathology in mandible. Skeletal & dental tracing were done for all the above panoramic radiographs. Sample size of 10 pathological cases for resection and immediate reconstruction by distraction were selected. A similar dimension template (dry mandible) was selected according to measurements compared between patients and dry mandible. Distractor device was constructed using the template & used on patients subsequently.
Results
It was observed that there was no significant dimensional difference between the two groups.
Conclusion
In our study the use of dry mandibular templates, indicates that the result is sufficiently accurate to enable the production of an optimally shaped distraction device thus reducing the operative time & cost.

EP-RS 49
Biomaterials In Maxillofacial Reconstruction

Premalatha Shetty, Gaurav Naik

Manipal College of Dental Sciences, Mangalore

Abstract
Biomaterials for reconstruction of bony defects of the skull comprise of osteosynthetic materials applied after osteotomies or traumatic

fractures and materials to fill bony defects which result from malformation, trauma or tumor resections. Other applications concern functional augmentations for dental implants or aesthetic augmentations in the facial region. Although there is no ideal biomaterial, numerous alternatives are available to practicing surgeons that provide attractive alternatives to autogenous bone graft in the appropriate clinical settings. Biomaterials are a particularly well suited for skeletal augmentation, since autogenous bone can often undergo unpredictable resorption in these applications. The indications for biomaterials are generally similar to those of autografts. Their main advantage is that they limit the morbidity caused by autograft harvesting. The benefits are aesthetic, functional or both. The huge variety of biomaterials for the reconstruction of bony defects makes it difficult to decide which material is adequate for which indication and for which site. The optimal biomaterial that meets every requirement (e.g. biocompatibility, stability, intraoperative fitting, product safety, low costs etc.) does not exist. The different material types are (autogenic) bone and many alloplastics such as metals (mainly titanium), ceramics, plastics and composites.

EP-RS 50
Hair Transplantation A Revolution In Cosmetic Era

Adithya Shai

Vyas Dental College and Hospital

Abstract
Hair transplantation is based on the principle that hairs moved from one part of the body and implanted in another part of the body will grow for as long as they would have grown in their donor location. Hair restoration has emerged as a subspecialty of aesthetic plastic surgery practiced by a wide range of doctors including plastic surgeons, Maxillo-facial surgeons, dermatologists, and even general practitioners. The field of hair restoration has witnessed dramatic changes in the past 2 decades, both in the understanding of the natural physiology of the hair follicle and in the surgical techniques used to replace areas of decreased hair density. In this poster we explore the latest medical, surgical, and technological developments in the field of hair restoration with an emphasis on safety and efficacy. We also explore current theories about the growth of the hair follicle and how that information has been used to develop hair restoration techniques with natural and aesthetically pleasing results. Though the success rate depends on patient selection, recent studies have shown the success rate of 95–98 % after two years of placement of graft.

EP-RS 51
Tissue engineering A new face of transformation

Suveeth Mathur

Vyas Dental College and Hospital

Abstract
Tissue engineering is the application of the principles and methods of engineering and life science towards the fundamental understanding of structural-function relationship in normal and pathologic mammalian tissues and the development of biologic substitutes that restore, maintain or improve tissue function. It's the study of growth of new connective tissue or organs from cells and collagens. Tissue loss due to trauma, disease or congenital abnormalities is a major healthcare problem worldwide. When this occurs in craniofacial region, it induces serious physiological and psychological consequences on patients. Tissues mainly used are osteoblast, periosteal cells, stem cells, marrow cells, chondroblast vascular cells for the applications on the treatment of fracture, alveolar ridge, TMJ disorder, implant, periodontal and endodontics. Strategies of Tissue engineering: Cell injection therapy, cell induction therapy, cells seeded scaffolds. Growth factors used bone morphogenic protein (BMP), Brain derived neurotrophic factor (BDNF), epidermal growth factor (EGF), erythroprotien (EPO), fibroblast growth factor (FGFPlatelet derived GF), thromboprotein (TPO), transforming growth factor alpha (TGF-α), transforming growth factor beta (TGF-β), This poster summarizes latest and advanced development in the field of tissue engineering and its application in oral and maxillofacial surgery. Presented: suveet mathur (PG)

EP-RS 52
CAD-CAM-Assisted Surgery Planning in Facial Reconstructive Surgery

Pratikshya K Kothia

Institute of Dental Sciences, Bhubaneshwar

Abstract
Computer aided design and manufacturing (CAD/CAM) technology today is the standard in manufacturing industry. The application of the CAD/CAM technology, together with the emerging 3D medical images based virtual surgical planning (VSP) technology, to craniomaxillofacial reconstruction has been gaining increasing attention to reconstructive surgeons.
Objective
This poster describes an insight into the computer-assisted facial reconstructive surgery planning and guidance.
Methodology
Using optical scans, virtual surgery is performed according to the 3-dimensional cephalometric results. Next, surgical templates are generated using rapid prototyping. These templates act as a guide during surgery. The CAD/CAM workflow are used successfully in facial reconstructive surgical procedures. In addition to surgical assistance, the advantages of the workflow include the possibility of discussing the treatment plan interactively with the patient and comparing and measuring simulation surgery with the actual outcome. As an additional benefit, the appropriate size of the alloplastic implants can be determined preoperatively.
Conclusion
CAD/CAM system is a novel and innovative technology to improve the predictability of the planning and outcome in facial reconstructive surgery. primarily on the technical aspects of the VSP and.

EP-RS 53
Reconstruction of Orbital floor fracture

Geeti Vajdi Mitra, Sumit Patida

Sri Aurobindo College of Dentistry Indore

Abstract
Orbital fractures are commonly encountered injuries in facial trauma. Orbit is located in the mid face with prominent position and complex

structure, and is closely linked with the adjacent craniofacial region. Orbital fractures which involve not only orbital walls, but also the rim and the adjacent parts, such as frontal, maxillary, zygomatic fractures, are called complex orbital fractures. Among all maxillofacial fractures, the incidence of orbital fractures is 57.4 % and the incidence of isolated orbital floor fractures is 21.4 %. Patients with this kind of fracture may suffer from seriously damaged appearance and visual impairment. Successful orbital and periorbital reconstruction following traumatic fracture depends on thoughtful preoperative planning, meticulous operative dissection and proper selection of implant type, size and contour. The optimal material for orbital reconstruction remains controversial but several studies have shown the reliability and safety of titanium mesh in reconstructing internal orbital defects. Titanium has excellent biocompatibility which result in low infection rate and rare postoperative migration of implant after titanium reconstruction. Titanium can be contoured to fit any internal orbital defects because of its significant tensile strength and malleability. Here we present a series of cases with orbial floor defect after traumatic fractures that present to the Department of Oral and Maxillofacial Surgery, Sri Aurobindo College of Dentistry Indore and our experienced with titanium mesh in the repair of these defect.

EP-RS 54
Asymmetry To Symmetry Made Possible By Maxillofacial Surgery

Noaman Kazi

Nair Hospital Dental College

Abstract
Facial asymmetry is quite common and, when sufficiently severe, can warrant surgical intervention. Asymmetry in the face and dentition is a naturally occurring phenomenon. In most cases facial asymmetry can only be detected by comparing homologous parts of the face. The etiology of asymmetry includes: a) Genetic or congenital malformations e.g. hemifacial microsomia and unilateral clefts of the lip and palate; b) Environmental factors, e.g. habits and trauma; c) Functional deviations, e.g. mandibular shifts as a result of tooth interferences, d) developmental; e) subsequent to pathology or injuries. A systematic and comprehensive examination, diagnosis, and treatment plan are requirements for successful correction of facial asymmetry. Patient complaints and desires need to be addressed since they may vary from unrealistic expectations to a lack of concern even in the presence of large deviations. With mild dental, skeletal and soft tissue deviations the advisability of treatment should be carefully considered.

EP-RS 55
Zygoma Reconstruction

Jeevan Lata, Prateek Bansal

Punjab Govt Dental College and Hospital

Abstract
Ideal reconstruction of the zygoma position is essential in restoring facial width, projection and symmetry. Reconstruction should be focussed on the zygoma's 4 articulation and restoring the vertical and horizontal pillars of facial skeleton. Failure to adequately flatten the zygomatic arch and achieve optimal rotation of the zygomatic—maxillary complex results in flattening of the malar prominence and widening of ipsilateral face. The basis for diagnosing and classifying zygoma deformities relates to severity of injury and associated displacement (post-traumatic, post ablative and esthetic).Complexity of zygomatic reconstruction ranges from Alloplastic, Autogenous to microvascular free vascular transfer, depending on factors related to both defect and patient.

EP-RS 56
Nasal Bridge Augmentation: Costochondral Graft Vs Silicone Implant

Sushant Math

Krishnadevaraya College of Dental Sciences and Hospital, Bangalore

Abstract
Saddle nasal deformity, characterized by a hypoplastic nasal dorsum with or without a poorly supported nasal tip, is one of the craniofacial developmental anomalies and a possible consequence of trauma. Other potential causes include syphilis, Wegner^{TM}s granulomatosis and post rhinoplasty. The popularity of augmentation rhinoplasty is increasing among the Asian populations. While various autologous and alloplastic materials are available for use in this procedure, there remains controversy regarding which material is best. The latter being shown to be less efficacious as a result of a higher rate of infection, extrusion and rejection. Bone and cartilage are the most widely used autogenous materials for nasal dorsal augmentation, bone grafts being harvested from the calvarium, iliac crest or rib, while cartilage grafts can be obtained from the nasal septum, ear concha or costchondral. Hence, we are presenting our experience and the merits and demerits of both costochondral graft versus silicone implant in nasal bridge augmentation.

EP-RS 57
Versatility of Radial Forearm Flap

Indu Bhusan Kar, Niranjan Mishra, Ajit Kumar Samal

S.C.B. Dental College & Hospital

Abstract
The radial forearm flap is ideal for intra-oral reconstruction, offering thin, pliable predominantly hairless skin to replace oral mucosa. The vascularity of the area allows considerable variation in the design of this fasciocutaneous flap and offers the possibility of including bone as an osteocutaneous flap. Furthermore, the vascular anatomy of the flap simplifies the technical aspects of free tissue transfer. Since its description as a free flap, the radial forearm flap has undergone numerous modifications for reconstruction of various defects in the head and neck region. Fasciocutaneous, adipofascial, osteocutaneous, tendinofasciocutaneous, or osteotendinofasciocutaneous flaps may be designed and transferred from the radial forearm.there is also uneventful healing of donor site in most of the cases.success rate is good approx 90 % of cases. So radial forearm free flap is, due to multiple advantages, an acceptable method for reconstructions after resection of intraoral malignancies.

EP-RS 58
Tissue Expanders in Oral and Maxillofacial Surgery

Puja Nirban

Punjab Govt Dental College and Hospital, Amritsar

Abstract
The principle of tissue expansion can be used in reconstruction of many hard and soft tissue defects of large dimension, which were previously regarded as great challenge for maxillofacial and plastic surgeons. Tissue expanders can be used in correction of post traumatic or postoperative alopecia, treatment of male pattern baldness, expansion of forehead skin prior to forehead flap in nasal reconstruction, cleft lip and cleft palate repair, expansion of postauricular skin prior to reconstruction of the external ear, expansion of cheek or neck skin to allow scar revision, burn excision, or other lesion removal when primary closure is not possible without undue tension. Tissue expansion improves tissue quality and quantity of soft tissue and facilitates primary wound closure. Closure of the flap is more easily achieved in bone graft surgery. Tissue expansion reduces the incidence of wound dehiscence and exposure of bone grafts. Making use of the viscoelastic nature of the skin, considerable amount of tissue expansion based tissue engineering is possible in the maxillofacial region. This poster illustrates the role of tissue expanders in oral and maxillofacial surgery.

EP-RS 59
Face Lift: A Rejuvenating Procedure

Jeevan Lata, Bharpur Sharan Sharma

Pb. Govt. Dental College & Hospital, Amritsar

Abstract
Face lifting or rhytidectomy has received significant attention over the past several decades owing to increasing patient demands for a more youthful appearance. The face undergoes harmonious changes in the facial skeleton, deep soft tissue elements and skin texture during the aging process. In the realm of Oral and Maillofacial Surgery, the rhytidectomy procedure finds great application as an adjunct to traditional skeletal surgery. Its goal should be to address all components of aging by reversing the effects of gravity and relaxation of the facial skin and fascia by resuspending the facial units and eliminating excess skin and subcutaneous tissue, leaving the patient with a younger appearing face and a long lasting results. As a restorative surgery, a facelift does not change the fundamental appearance and cannot stop the aging process. A facelift can only be performed surgically; non-surgical rejuvenating treatments cannot achieve the same results, but may help delay the time at which a facelift becomes appropriate and complement the results of surgery. The surgical correction of an anatomic defect should re-establish the normal relationship of the tissues which contribute to the defect and restore or improve function. When the repair of the anatomic defectis not maintained, it may be necessary to alter the tissues to accomplish a more lasting result. This fulfills the criteria of the young face by improving the function and contours of the face (changes that are characteristic of aging). Numerous techniques are currently used for performing facelifts but no general agreement as to which of these techniques is most effective. These include SMAS lift, Deep plane facelift, Composite facelift, Mid facelift, Mini-facelift or S lift, Thread Lift, Subperiosteal facelift, Skin only Facelift and MACS or Minimal Access Cranial Suspension facelift. By tailoring the approach to the specific needs of each patient, based on a thorough knowledge of surgical anatomy, the maxillofacial surgeon should achieve consistently good results with minimum morbidity.

EP-RS 60
An Innovative Computerized, 3d Milled and Drilled Patient-Specific Mandibular Crib Using Cad Cam Technology

Abhishek Akare, P K Pandilwar, Abhay N Datarkar

Government Dental College Nagpur

Abstract
Background Preoperative planning of mandibular reconstruction has moved from mechanical simulation by dental model casts into an almost completely virtual environment. CAD/CAM applications allow a high level of accuracy by providing a custom template-assisted contouring approach for reconstructing mandible and placement of implants. The placement of implants into a virtually planned neomandible with simultaneous provision of an implant-supported prosthesis is reported in literature. A reasonably high level of accuracy was achieved in CAD/CAM based template-assisted mandibular reconstructions. However, a factor, which may limit the accuracy of virtually planned reconstructions, is the shift back to analogue mode necessitated by the use of manually present reconstruction plates halfway through the workflow to clinical implementation. The following case report demonstrates the use of an innovative computerized, 3D milled and drilled patient-specific mandibular crib and precludes potential deficiencies inherent to present reconstruction plates. Objective This case report demonstrates the use of an innovative computerized, 3D milled and drilled patient-specific mandibular crib. Methodology Custom fabricated implant was used for 50 year old female patient with mandibular defect requiring reconstruction using CAD CAM technology and metallic milling.
Result
Good esthetic results with good functional outcome were achieved initially. Later dehiscence of size 1.5 cm was noted postoperatively with implant exposure and was managed by local wound care as implant was made at the level of adjacent bone. Conclusion In spite of complication occurred, this custom made fabricated implant opened a new window that custom made metallic implants should be designed at a level lower than that of adjacent bone. The metallic crib provides the surgeon with an option to fill that crib with bone grafts thus providing bone for placements of implants thus helping us in achieving good functional outcome along with good esthetic results.

EP-RS 61
Management of Oral Submucous Fibrosis Using Bilobed Single Radial Forearm Free Flap

Veer Vikram Singh Babra, Senthil Murugan, K. K. Raja

SRM Dental College, Ramapuram

Abstract
Successful closure of defect results from OSMF surgery is treated with various methods like, Skin grafts, buccal pad of fat, nasolabial

flaps etc. Application of bilateral RFFA is also one of the procedures to treat the resultant defect in the oral epithelium. However, as the procedure is extensive while involving the bilateral forearms, the flap from one arm with a modification of two lobes to cover the bilateral defects avoids the need for the second donor site. This poster elaborates the single radial forearm bilobed free flap for bilateral OSMF case.

EP-RS 62
Microvascular Anastomosis—Comparison between Conventional sutures, Couplers and Microstaplers

M. Senthil Murugan, K. Mohamed Afradh

SRM Dental College, Ramapuram

Abstract
Free tissue transfer allows the restoration of both function and aesthetics in one stage and shows a high reconstructive flexibility especially in complex or extensive defects. Successful outcome of microvascular surgery depends predominantly on the precision of anastomosis of blood vessels. Any voluminous free flaps need to be restored with circulation, for the survival of the flap. Conventionally, microsututures are used in coapting the vessels in order to restore the blood circulation to the flap. However, suturing is technically intricate and requires intense practice to perform in a better speed. As an alternate, vascular couplers and micro staplers have emerged to approximate the vessel ends in a faster way which results in reduced ischemic time for the flap. This presentation highlights on the various methods for anastomosis of the blood vessels and enlightens on the advantages and disadvantages of each method.

EP-RS 63
Mandibular Reconstruction With Vascularised Fibula Graft—A Case Report

Uday S Londhe, Swati R Bharadwaj

D Y Patil Dental College and Hospital, Pune

Abstract
Ameloblastoma is a benign but locally aggressive tumor with a marked tendency for recurrence. The ideal management of ameloblastoma should minimise recurrence, restore function and appearance and present minimal donor site morbidity.
Objectives and Methodology
A 27-year-old patient, reported with an extensive ameloblastoma of the right mandible, extending from the canine upto the sigmoid notch. He underwent right hemimandibulectomy and immediate reconstruction with left fibula osteocutaneous flap. The bone was shaped at the lower limb before cutting the pedicle and osteotomised to obtain desired angle at chin and fixed by internal fixation with screws and reconstruction plates.
Result
Mandibular reconstruction represents a challenge to the Oral and Maxillofacial surgeon and has been revolutionized by the modern microvascular techniques. Vascularised free fibula flap provides a good alternative to other bone grafts in mandible reconstruction as it is relatively easy to perform, carries a low complication rate, and mandibular shaping with intact pedicle cuts down on ischaemic as well as total operative time.
Conclusion
This one step of immediate reconstruction procedure decreases the number of surgeries and allows early prosthetic rehabilitation.

EP-RS 64
Tissue Expanders In Oral and Maxillofacial Surgery

Yama N. Patel

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Abstract
Reconstruction of the defects after surgical resection of large amount of bone and soft tissue is one of the important issues in surgical field. It is essential that the defect should be covered with a tissue quite similar to the original one and is best achieved by harvesting tissue from an area adjacent to the defect. Tissue expansion is one of the most frequently used reconstructive techniques in maxillofacial and plastic surgeries. Stretching the tissue beyond normal expansion invokes several mechanotransduction pathways which increases mitotic activity and collagen synthesis which helps in reconstruction of the defect.

EP-RS 65
Nasolabial Flaps for The Reconstruction of Mucosal Defects

Vachhani Dipu

A. J. Institute of Dental Sciences

Abstract
Oral submucous fibrosis is a chronic debilitating disease associated with restricted mouth openg and poor oral hygiene. The treatment aims at good release of fibrosis and to provide long term results in terms of mouth opening. Various local grafts have been used to cover the buccal mucosal defects after the fibrotic bands are released in oral submucous fibrosis We used inferiorly based Nasolabial flaps for the reconstruction of mucosal defects after excision of fibrous bands. The advantages of nasolabial flap include its close proximity to defect, easy closure of donor site & a well camouflaged scar. The technique is easy to master and defects as l arge as 6 to 7 cm can be closed.

EP-RS 66
Tissue Engineering In Oral and Maxillofacial Surgery

Arati C. Akhani

Karnavati School of Dentistry, Gandhinagar, Gujarat

Abstract
The prominent position adopted by oral and maxillofacial region makes it particularly vulnerable to injury and infections thus it is a

major consideration providing opportunities for tissue engineering reconstruction. Tissue engineering applies the principle of engineering and life science toward development of biological substitutes that restore, maintain or improve function or whole organ. Tissue engineering, which aims to create tissue matched with bone or soft tissue or both, therefore as a potential to revolutionized practice in maxillofacial surgery.

EP-RS 67
Reanimation of Lip After Salvage Surgery For Squamous Cell Carcinoma of Anterior Mandible

Nazrealam Ansari

R.Ahmed Dental College and Hospital

Abstract
Oral and maxillofacial defect reconstruction is a major challenge for maxillofacial surgeons and reconstruction after salvage surgery such as carcinoma is added difficulty due to its large amount of defect. Even though after cancer surgery patient's life span increases, the quality of life hampers a lot. So we have to think in the functional rehabilitation aspect for these patients. In this presentation, I am presenting a post operated case of squamous cell carcinoma of anterior mandible which was resected and reconstructed with pectoralis major myocutaneous flap. Post operatively patient had severe lip incompetence and functional problems. Lip was secondarily reanimated using palmaris longus tendon with flap debulking. Patient was regularly followed up. Improvement in lip competence, oral functions and nutrition was noted and reported

EP-RS 68
Innovations in Orbital Reconstruction

Vishal Mittal, Amit Dhawan

Sri Guru Ram Das Institute of Dental Sciences and Research

Abstract
Reconstruction of defects in the head and neck region to achieve pleasing aesthetics and adequate function is challenging. Fractures of the orbital wall and floor can be challenging due to the demanding three-dimensional anatomy and limited intraoperative overview. Misfitting implants and inaccurate surgical technique may lead to visual disturbance and unaesthetic results. The importance of function and aesthetics has driven advances in the accuracy of surgical techniques. In this poster we discuss the developments in navigation systems, three dimensional imaging, stereo-lithographic models, patient specific implant (PSI), robotic surgeries, triangular approximation concept and the use of custom-made implants which can aid and improve the accuracy of existing reconstructive methods of orbital fractures.

TMJ Disorders and Surgery (CODE- EPTM)

EP-TM-1
Distraction Osteogenesis In The Treatment of TMJ Ankylosis With Mandibular Micrognathia

Kirti Arora

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Abstract
Aims and objective
Temporomandibular joint (TMJ) ankylosis is the fusion of the condyle to glenoid fossa resulting in decreased movements of the mandible leading to severe debilitation. If it occurs at a young age it can affect growth of the mandible, leading to micrognathia, compromised function and esthetics. Diagnosis and treatment, if done at an early age, would save the patient from an indelible scar in his psyche and help to attain growth. Even though adequate research has been done from a treatment perspective, each having its own advantages and disadvantages/ merits and demerits, we, in this article have tried to put forth our experiences regarding the treatment aspect/ protocol of treating ankylosis as well as micrognathia via distraction in the same operation/ as a single procedure.
Materials and Methods
9 patients with TMJ ankylosis with micrognathia were treated with gap arthroplasty and simultaneous distraction osteogenesis and followed for a period of 3 years. Preoperative, immediate postoperative, at the end of distraction, at 6 months and 3 years post distraction consolidation radiographs were taken along with the clinical examination for mouth opening, deviation, length of the mandible and ramus were assessed.
Results
The results showed increased mouth opening, length of the mandible and ramus height, decrease in deviation and midline shift. Relapse was not seen in any case, rather, one patient developed infection of the distractor site. There was an overall improvement in the facial symmetry.
Conclusion
Simultaneous gap arthroplasty and distraction osteogenesis should be used to correct TMJ ankylosis associated with facial asymmetry/micrognathia, as it reduces the need for second surgery, increases the length of the mandible, improves the deformity thereby resulting in an acceptable facial esthetics and function.

EP-TM-2
Gold Standards In Imaging For Temporomandibular Joint Disorders

Chandrashekar Raju, K. Ranganath

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Abstract
The integrity of a complex joint such as that of the temporomandibular joint (TMJ) is the result of a balanced interaction of soft

tissue and bony structures. Trauma, internal derangement, osteoarthritis and inflammation are the most common forms of pathologic conditions. The ability to formulate an optimal diagnosis is based on a thorough understanding of the normal anatomy and physiology of structures of the jaw. Imaging of the joint is an important element in the diagnostic work-up. TMJ imaging is an adjunct to the clinical examination and provides useful information about the joint components. The choice of imaging technique depends on, the specific clinical problem, whether hard or soft tissues will be imaged, radiation dose, cost, availability of the imaging technique and the amount of diagnostic information provided by the technique. Conventional radiography using different techniques helps identify gross bone abnormalities. The computed tomography especially multi section is the modality of choice for assessing the temporomandibular disorders (TMD). Soft tissue anatomy is best depicted with magnetic resonance imaging and is a standardized imaging protocol. The purpose of this poster is to review current TMJ imaging techniques so that the dental practitioner understands the contribution, imaging can make in the diagnosis of TMD.

EP-TM-3
Arthrocentesis As A Treatment Modality For Internal Derangement of TMJ

Gaurav Kataria

Institute of Dental Studies and Technologies

Abstract
TMJ disorders are an ever increasingly encountered clinical condition. These include masticatory muscle disorders, inflammatory disorders, disc-interference disorders and growth disorders. Internal derangement, a type of disc interference disorder is cited as one of the most common clinically characterized with pain, joint sounds, and restriction of joint function during mandibular movements and irregular or deviating jaw function. Arthrocentesis with joint lavage is the simplest form of surgical intervention & is suggested to be as used as an initial procedure in the surgical algorithm. It is a minimally invasive procedure which reduces pain, joint sounds & improves mouth opening. It works on the principle that it could loosen adherent disc, remove inflammatory content & pain-mediators allowing nutrient perfusion & thereby free sliding movement of the disc. A range of solutions like –Ringer's lactate solution, Betamethasone valorate, Sodium Hydrocortisone, Sodium Hyaluronate, Hyaluronic acid, Normal saline are being popularly used. We present an overview on arthrocentesis with indications, methods and advantages as the first step in surgical treatment modalities of TMJ disorder.

EP-TM-4
Options For Total TMJ Joint Replacement For TMJ Ankylosis Patients

Gaurav Mittal, Santosh Kumar

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Abstract
Temporomandibular joint (TMJ) ankylosis is one of the most disruptive maladies that can afflict the masticatory system, resulting in facial asymmetry/deformity, malocclusion and dental problems. The treatment of TMJ ankylosis is surgical, either gap arthroplasty, interpositional arthroplasty and/or joint reconstruction using autogenous grafts or alloplastic materials. A successfully reconstructed TMJ should reproduce normal joint structure, provide functional articulation, and permit adaptive growth or remodeling. Various autogenous grafts are available for condylar reconstruction after freeing the ankylotic mass such as costochondral, fibular, and coronoidsternoclavicular, iliac creast, metatarsophalangeal, posterior border of ramus. Alloplastic temporomandibular joint (TMJ) prosthesis such as kent-vitek total prosthesis, Christensen prosthesis, Lorenz prosthesis, Techmedica custom made total joint prosthesis can provide accurate adaptation to the anatomical structures of each individual patient and are a reliable alternative in the treatment of ankylosis. Proving to be a promising method Distraction osteogenesis is gaining popularity and may ultimately become the standard procedure, providing a costeffective approach with low morbidity and excellent functional outcomes. We briefly present various options for TMJ joint replacement for TMJ ankylosis patients with their advantages and disadvantages.

EP-TM-5
Surgical Treatment of TMJ Ankylosis With Temporalis Fascial Flap

Sandhya Rani Badugu

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Abstract
Temporomandibular joint (TMJ) ankylosis involves the fusion of the mandibular condyle with the base of the skull. It is an extremely disabling affliction. In growing patients, deformities of the mandible and maxilla may occur together with malocclusion causing dysphonia, dysphagia, facial deformity, impairment of upper airway and psychological stress. Mandible function rehabilitation, prevention of relapse and promotion of mandible growth are the main goals of the treatment. The different techniques for TMJ ankylosis are (1) resection of ankylotic mass, (2) ipsilateral coronoidectomy, (3) contralateral coronoidectomy, (4) interpositional arthroplasty of TMJ with temporal fascial flap, (5) maxillomandibular fixation, (6) early mobilization and aggressive physiotherapy. The most commonly surgical approach used to restore normal joint functioning is interpositional arthroplasty. This poster highlights the treatment of Temporomandibular ankylosis with interpositional athroplasty using temporalis fascia in St. Joseph Dental College, Eluru.

Keywords
Temporomandibular Joint ankylosis; coronoidectomy; temporal fascial flap; interpositional arthroplasty; physiotherapy

EP-TM-6
Treatment Modalities In TMJ Pain

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Abstract
In the past, disorders of the masticatory system were generally treated as one condition, with no attempt to differentiate subtypes of muscle and joint disorders. With increased understanding, the ability to

identify different muscle or joint disorders has become possible; this should lead to a better understanding of the natural course, more accurate predictions of prognosis, and more effective treatments. The term temporomandibular disorders (TMDs) is a collective term embracing a number of clinical problems that involve the masticatory muscles, the temporomandibular joints and associated structures, or both. Temporomandibular joint (TMJ) disorders are recognized as the most common chronic orofacial pain condition characterized by pain in the TMJ area, masticatory muscles and associated musculoskeletal structures. This leads to considerable socioeconomic costs as a result of medical treatment, surgical interventions and frequent absences from work. Epidemiological studies show that about 75 % of the population presents one sign of temporomandibular disorders (TMD) and 35 % present at least one symptom, however, only a minor percentage of the population, 3–7 %, presents problems severe enough to look for treatment for TMD. Due to TMD's multifactorial etiology, and variety of clinical presentations, the treatment of this disorder is extensive and diverse, involving professionals from different areas and includes several therapies, however no therapies have been shown to be uniformly superior in the management of pain and dysfunction. Temporomandibular joint disorder cause excruciating pain of multifactorial origins. Inflammation of surrounding muscles, posterior fibres, synovial fluid is most common cause, apart from occlusal disturbances and psychological reasons. Various treatment methods, muscle relaxation therapies, occlusal splints, medications-analgesics, NSAIDs, COX2, anti depressants have been used for the relief of TMD. The debate surrounding the effectiveness of surgical intervention for TMD has led many patients to seek conservative care for the management of pain and associated loss of function. But the search for better pain relief continues. I would like to present my poster stating the different treatment modalities in TMJ Pain, helping the patients for their clear understanding to undergo further treatment care.

EP-TM-7
Reconstruction of The Ramus-Condyle Unit After Osteoarthrectomy In Temporomandibular Joint Ankylosis: The Autogenous Sternoclavicular Graft Versus Transport Distraction Osteogenesis

Sujata Mohanty, Sanchaita Kohli

Maulana Azad Institute of Dental Sciences

Abstract
Reconstruction of the mandibular condyle following excision of ankylotic bone is essential to maintain ramus height, prevent occlusal disturbances and restore biomechanics of the normal mandible, but it remains a challenge because of the unique anatomical structure of the ramus-condyle unit (RCU). The study aims to compare RCU reconstruction with sternoclavicular grafts (SCG) and transport distraction osteogenesis (TDO) following osteoarthrectomy in temporomandibular joint (TMJ) ankylosis. 18 adult patients with unilateral TMJ ankylosis underwent osteoarthrectomy followed by RCU reconstruction with SCG (Group I) and TDO (Group II) in 9 patients each. Length of the procedure, six month postoperative pain, maximal mouth opening (MMO) and excursive movements were measured, condylar morphology assessed on six month postoperative CT scan and compared for both groups. Results showed longer mean duration of surgery for Group I (125.2 min versus 95.1 min with TDO). MMO was 30 mm for Group I, 32.6 mm for Group II. Pain scores and excursive movements were comparable for both groups. Radiographically, greater condylar heights, widths and significantly lower resorption ($p = 0.01$) was seen in SCG group. To conclude, RCU reconstruction with both SCG and TDO in TMJ ankylosis patients provide adequate jaw function but superior condylar morphology is achieved with SCG.

EP-TM-8
An Indigenous TMJ Device For Management of TMJ Ankylosis: Our Experience

Iqbal Ali, R. K Srivastava, Puneet Wadhwani, Amina Adil

Career Postgraduate Institute of Dental Sciences and Hospital

Abstract
Several modalities have been described in literature to reconstruct TMJ following ankylosis release in growing children.they range from autogenous grafts to alloplastic joints to prevent recurrence and restore form and function. We describe a case of a 13 yr old child who underwent TMJ gap arthroplasty and an indigenous device was placed to restore form and function. Not only was the joint functionally stabilized but economical and can hence become a part of reconstructive armamentarium.

EP-TM-9
Lateral Gap Arthroplasty For Type III TMJ Ankylosis-A Current Conservative Approach (A Case Report)

Daya Shankar Rao Jk, Alok Bhatnagar, Aadhya Sharma, Varun Arya, Vijay Siwach, Vikram Singh

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Abstract
Temporomandibular joint ankylosis is a joint disorder that refers to bony adhesion of the anatomic joint components with ensuing loss of function; it occurs mainly after trauma and secondarily after infection. We report a case of 8 yr old female who presented to the department of Oral & Maxillofacial Surgery SGT Dental College, Gurgaon with the limited mouth opening of 20 mm. History revealed, she had a fall from the terrace 2yrs back following which her mouth opening gradually reduced. There was also a scar on her chin which correlated with the history of trauma. She was diagnosed as type III left bony TMJ ankylosis according to Sawhney^{TM}s Classification by coronal CT scans and required surgical intervention. There are a multitude of surgical techniques which have been described in literature. Lateral gap arthroplasty (LGA), a new modality was used which involved resection of the lateral part of the ankylosed bone from the medial functional condyle. It appears to be useful in terms of maintaining the height of ramus, preserving the growth centre, achieving 35 mm mouth opening postoperatively and promoting rehabilitation of

mandibular function.

Keywords
TMJ Ankylosis, Latera gap arthroplasty, rehabilitation, mandibular function

EP-TM-10
The Cushioning of Your Joint, Interpositional Gap Arthroplasty

Rushika Jain, Sima Mazumdar

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Abstract
TMJ ankylosis is a highly distressing condition in which the joint space is obliterated by scar tissue and the patient has inability to open the mouth. Main goal of treating ankylosis is to achieve adequate mouth opening with minimal chance of recurrence. Relapse is common due to fibrosis and ossification occurring in the gap, hence interpositional materials are important to prevent recurrence. Interpositonal gap arthroplasty is one of the useful technique that has been employed for management of this condition. Interpositional material is inserted between the osteotomized site to prevent ankylosis of the bony fragments.Different autogenous and alloplastic interpositional materials have been used. The objective of this poster is to illustrate Interpositional arthroplasty in TMJ Ankylosis.

EP-TM-11
Duplicating the Original Alloplastic TMJ Reconstruction!!

Pragati Naval, Sima Mazumdar

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Abstract
End-stage temporomandibular joint pathology resulting in its architectural form distortion and physiological dysfunction dictates the need for total joint replacement. Mainstay for treatment of end-stage disease has been with total alloplastic replacement. Now the essential life functions of mastication, speech, airway support and deglutition are supported by temporomandibular joint. Over a lifetime, this puts the temporomandibular complex under more cyclical loading and unloading than any other joint. Therefore, to provide long-term effective outcomes, the temporomandibular joint device selected must be capable of managing the anatomical, functional and aesthetic discrepancies that dictated its use. The primary goal of total temporomandibular joint reconstruction is the restoration of mandibular function and form. New virtual surgery planning techniques like CAD/CAM and advances in biomaterials have made it possible to undertake increasingly complex cases of temporomandibular joint reconstruction. The objective of this paper is to highlight the various alloplastic replacement methods and the recent advances in the same which are used as a fitting management option for end-stage temperomandibular joint disorder.

EP-TM-12
Myofascial Pain Dysfunction Syndrome (MPDS)

Amrita S. Shinde, Sanjay Joshi, Sima Mazumdar

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Abstract
TMD (temporomandibular joint disorder) is considered the most common musculoskeletal disorder that causes orofacial pain. MPDS (myofascial pain dysfunction syndrome) has been used to describe those disorders that involve only the muscles of mastication and associated fascia, which are the results of excessive muscle activity resulting in muscle pain. The cause behind muscle pain include overuse of a muscle or ischemia of a normally working muscle, sympathetic reflexes that produce changes in vascular supply and muscle tone, and changes in psychological and emotional states. Symptoms of MPDS include decreased mandibular range of motion, muscle and joint pain, and functional limitation or deviation of the jaw opening. Treatment can be divided into non-invasive, minimally invasion, and invasive options. Only after failure of non-invasive options should more invasive treatment be initiated.

EP-TM-13
Treatment of Temporomandibular Joint Ankylosis & Facial Asymmetry By Simultaneous Genioplasty With Ankylosis Release—Case Series

Vipul Nagavadiya Siddharth Vyas

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Abstract
Background
Ankylosis of the Temporomandibular Joint not only prevents mouth opening and chewing, but also affects the growth and position of the mandible; producing progressive facial distortion with devastating psychosocial effects, compounding the already difficult problem of not being able to open mouth. Even after its release it may yield facial deformities that limit structural & functional efficiency with compromised esthetics; often requires secondary surgery. It may also lead to Obstructive Sleep Apnea due to decreased posterior airway space leading to poor quality of life.
Objective
A careful clinical & radiographic evaluation is required to address actual problem. By doing TMJ ankylosis release & simultaneous genioplasty, there lies added advantages of correction of facial deformity, improvement of airway along with functional efficiency of jaws, obviates need of secondary surgery.

Methodology
The case series of 3 patients presented here discusses the treatment of such facial deformities and ankylosis by interpositional arthroplasty with simultaneous genioplasty.
Results
Postoperative results reveal drastic improvement in facial esthetics along with improvement of airway space and stable results even at the follow up of a year and a half.
Conclusion
With already addressed problem of mouth opening, Simultaneous genioplasty with ankylosis release serves to overcome Post release Obstructive sleep apnea along with far better facial esthetics in single stage surgery.

EP-TM-14
Modalities of TMJ Imaging

S. S. Sushant

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Abstract
The evolution of imaging in dentistry has provided several advantages for diagnosis and development of treatment plans in various dental specialities. Temporomandibular joint (TMJ) abnormalities cannot be easily assessed by clinical examination. Radiographic examination forms an integral component of clinical assessment routine in patient with TMJ disorders. There are several imaging modalities to visualize TMJ. Examination as nuclear imaging resonance, ct and cbct. Recent advances in imaging technologies have greatly contributed to the understanding of diseases of TMJ. The aim of this poster is to review different imaging modalities and its efficacy in TMJ disorders

EP-TM-15
A Simple, Effective Method To Control Intra-Operative Bleeding From Vessels Medial To The Temporomandibular Joint

Sanjeev Kumar, Pankaj Kukrerja, Bharat Bhati

I. T. S CDSR

Abstract
Temporomandibular joint ankylosis is a condition which requies Aggressive resection of the condyle and/ or coronoid process of mandible and this is often complicated by severe hemorrhage from vessels which lie in close proximity to the medial aspect of the neck of the condyle. Any of the several vessels in the pterygoid fossa may be the cause of excessive bleeding. These include the pterygoid venous plexus, maxillary artery and its branches namely, middle meningeal artery, mandibular artery and deep temporal artery. Suggested management to control hemorrhage has included uni and bipolar electrocautery, LASER ablation, local anesthetics with vasoconstrictors, direct pressure, embolization, and ligation. The briskness of the hemorrhage, retraction of the bleeding vessel and the limited access often preclude the possibility of catching or ligating the bleeding vessel under direct vision. With the help of this poster, we present a simple technique of controlling hemorrhage by digital compression which has shown to significantly control intra-operative bleeding from vessels medial to the condyle.

EP-TM-16
Surgical Management of Recurrent TMJ Dislocation

Priya Gupta

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Abstract
Background
Numerous surgical procedures for habitual dislocation have been described in the literature based on the creation of a mechanical obstacle in the condylar path; another type of treatment is removal of the mechanical obstacles in the condylar path.
Objective
The aim of this poster is to compare various types of treatment for chronic mandibular dislocations. Methodology: The various procedures will be described, and their advantages and disadvantages will be discussed.
Results
All treatment modalities for recurrent TMJ dislocation were discussed and its pros and cons were analysed.
Conclusion
Eminectomy had less chance of recurrence without creating articular damage, and with miniplates, the chance of recurrence increased because there is always the possibility of the miniplate fracturing.

EP-TM-17
Conservative Temperomandibular Disorder Management: What Do Surgeons Do???

Ujjal Das

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Abstract
Temperomandibular disorders is a multifactorial disease process caused by muscle hyperfunction or parafunction, traumatic injuries, hormonal influences and articular changes. Symptoms of Temperomandibular Disorders include decreased mandibular range of motion, muscle and joint pain, joint crepitus and functional limitation or deviation of jaw opening. Treatment can be divided into noninvasive, minimally invasive and invasive options. Only after failure of noninvasive options should more invasive and non-reversible treatments be initiated. Temperomandibularjoint replacements is reserved for severely damaged joints with end stage disease that has failed all other more conservative treatment modalities. The majority of patients with Temperomandibular Disorders achieve good relief of their symptoms with noninvasive, conservative therapy. Pharmacologic agents are the first line of intervention. It should be used in conjunction with other non pharmacological treatment modalities.As

Temperomandibular Disorder is multifactorial, a multidisciplinary, conservative approach will help to bring about an effective long term management.

EP-TM-18
Review of Various Modalities for Management of Recurrent Temporomandibular Joint Dislocation

S. K. Gupta, Swapnil Sachan

D. J. College of Dental Sciences

Abstract
Dislocation of the temporomandibular joint (TMJ) is one of many pathophysiologic joint conditions that oral and maxillofacial surgeon is challenged with managing it. It is found more frequently in people with general joint laxity and in patients with internal derangement of the TMJ or with occlusal disturbances, like loss of teeth. It may be associated with neurologic diseases. Recurrent dislocation of the condyle may cause injury to the disc, the capsule, and the ligaments, leading to progressive TMJ internal derangement. we start management of temporomandibular joint dislocation with conservative treatment which includes injection of sclerosing agent such as hyaluronic acid, 10 to 50 % dextrose, autologous blood, platelet rich plasma, and botulin toxin type A. surgical procedures are indicated when nonsurgical modalities have failed. Surgical modalities include temporalis scarification, lateral pterygoid myotomy, eminectomy, Dautrey's procedure, condylectomy, condolotomy, glenotemporal osteotomy with interpositional bone graft, and implant placement. Arthroscopy-assisted posterior capsulorraphy and contracture as a newer treatment modality in recurrent TMJ dislocation. This poster reviews various treatment modalities for management of recurrent temporomandibular joint dislocation

EP-TM-19
Autologous Blood Injection A Boom In Recurrent Temporomandibular Joint Dislocation

Joyce P Sequeira, Pallav Raj

Yenepoya Dental College

Abstract
Various surgical and non surgical techniques have been used to treat patients with chronic recurrent temporomandibular joint dislocation. The non surgical techniques consist of injecting different sclerosing agent into the temporomandibular joint cavity. It occurs when the condyle moves anterior to the articular eminence. It may happen by yawning, laughing, excessive mouth opening during dental treatment, general anesthesia procedures etc. This poster reports some cases treated with intra-articular injection of autologous blood in the TMJ for treatment of chronic recurrent TMJ dislocation. The skin overlying the TMJ was scrubbed with an antiseptic solution and local anesthesia was administered to the auriculotemporal nerve. The articular fossa was located at a point 10 mm anterior to the tragus of the ear and 2 mm inferior to the tragal-canthal line. With a 21-gauge needle, 4 ml was injected into the articular cavity and 1 ml was injected into the pericapsular tissues. Then crepe bandage was applied for 24 h to constrain the joint movements and advised to restrict joint movements and eat soft diets for 1 week. Degenerative changes such as osteoarthritis or fibrous ankylosis were not observed radiologically. However, there were no structural variation that described the prevention of the dislocations such as fibrosis in MRI findings in literature.

EP-TM-20
Still's Disease Steals TMJ

Akash prajapati, Anil Managutti

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Abstract
Abstract Still's disease is a disorder characterized by high spiking fevers, salmon-colored rash that comes and goes, and arthritis. Still's disease is also referred to as systemic onset juvenile idiopathic arthritis. Temporomandibular joint (TMJ) is very rare to be affected in the early phase of the disease, thus posing diagnostic challenges for the maxillofacial surgeons. Conventional radiographs fail to show the early lesions due to its limitations. More recently cone-beam computed tomography (CBCT) has been found to diagnose the early degenerative changes of TMJ and hence aid in the diagnosis of the lesions more accurately. This case report is an effort to bring forth a case of bilateral TMJ Ankylosis associated with asymptomatic rheumatoid arthritis in an 18 year male, who presented with nil mouth opening. The TMJ Radiological examination showed a radiopaque lesion of the mandibular head and glenoid fossa in the both side and bilateral TMJ ankylosis was diagnosed on the basis of the clinical and radiological findings. Bilateral condylectomy followed by placement of myofascial temporal flap was performed. Up to our knowledge no case has been reported in the literature having bilateral TMJ ankylosis in still's disease in such a young age. This case illustrates the importance of a comprehensive clinical examination and correct diagnosis of an unusual condition causing severe mouth opening limitation.

Keywords
Bilateral TMJ Ankylosis, Condylectomy, Myofacial Temporal Flap, Still's Disease

EP-TM-21
Auricular Chondritis, After Gap Arthroplasty In Temporomandibular Joint (TMJ) Ankylosis Patient: A Rare Complication

Ashish Gupta, Pankaj Bansal and Rahul Sharma, Ishita Rathee

Sudha Rustagi College of Dental Science and Research

Abstract
A 12 year old female patient reported to our department with inability to open her mouth. She was diagnosed with Sawhney type III ankylosis & treated with Gap arthroplasty under genreral anaesthesia. Interincisal distance of 34 mm was achieved with regular postoperative mouth opening exercises. She reported again after 7 days of surgery with severe pain, redness and swelling of the cymba concha of right ear. Inspite of empirical oral antibiotics the inflammation of the auricular cartilage did not show any sign of remission for the following three days and transudate started draining from lowest point of Al-Kayat Bramley incision, which was sent for sensitivity test. TMJ ultrasound was done to rule out foreign body. Treatment

included incision and drainage and intravenous administration of sensitive antibiotics. Present case report describes the procedures performed to diagnose & treat the rare complication auricular chondritis after gap arthroplasty and functional rehabilitation of the patient.

EP-TM-22
Role of Arthrocentesis In Internal Derangement—A Pilot Study

K. Y. Giri, Rajat Prakash

Institute of Dental Sciences Bareilly

Abstract
Internal derangement is defined as an abnormal relationship of the articular disc to the mandibular condyle, fossa and articular eminence. Clinically internal derangements are characterized by interference of restriction of joint function during mandibular movement. Joint noise, especially clicking, is a common finding. The conservative means of treatment are medication, bite appliances, physiotherapy and manipulation of joints. When it fails to provide a solution, surgical intervention such as surgical disc repair and repositioning are used. One of the most acceptable minimal invasive surgery is arthroscopic lavage/arthrocentesis of the superior joint compartment. Objective: To evaluate the effectiveness of arthrocentesis for the treatment of internal derangement. Methodology: Five patients were selected randomly with the chief complaint of pain and clicking sound. After conservative treatment, we performed arthrocentesis as treatment. The changes in the maximum mouth opening, joint pain and clicking sound were examined to determine the effectiveness of the treatment before the treatment and after the treatment.
Results
After 2 months follow up maximal mouth opening of patient increases, joint pain at mouth opening and clicking sound were reduced effectively. Conclusion: Arthrocentesis is a simple, less invasive, inexpensive and highly efficient procedure which can be performed under local anaesthesia for the treatment of internal derangement.

EP-TM-23
Temporomandibular Joint Arthroscopy

Aditya Harsh

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Abstract
Background
Arthroscopy is a surgical technique in which a tube-like instrument is inserted into a joint to inspect, diagnose, and repair tissues.
Objective
The aim of this poster is to discuss the technique of arthroscopy in TMJ dysfunction and its advantages and disadvantages.
Methodology
Arthroscopy of the temporomandibular joint is sometimes used as either a diagnostic procedure for symptoms and signs related to these joints, or as a therapeutic measure in temporomandibular joint dysfunction. TMJ arthroscopy can be a purely diagnostic procedure, or it can have its own beneficial effects which may result from washing out of the joint during the procedure, thought to remove debris and inflammatory mediators, and may enable a displaced disc to return to its correct position. Arthroscopy is also used to visualize the inside of the joint during certain surgical procedures involving the articular disc or the articular surfaces.
Conclusion
Arthroscopic surgery appears to be a safe, minimally invasive and effective method for treating internal derangements of the temporomandibular joint, reducing pain and increasing mandibular range of motion.

EP-TM-24
Use of Costochondral Graft In Management of Temporomandibular Joint Ankylosis—A Case Report

Hemant Gupta, Deepak Kumar, Sarita Seth

Babu Banarasi Das College of Dental Sciences, Lucknow

Abstract
Background
Treatment of temporomandibular joint (TMJ) ankylosis usually requires adequate excision of the involved ankylotic mass (arthroplasty) without interposing any material (gap arthroplasty) or interpositional arthroplasty using autogenous or alloplastic materials.
Objective
To note the potential of the costochondral graft (CCGs) as an interpositional material and to see whether they induce normal growth potential in the reconstructed mandible.
Method
The ankylosed temporomandibular joint was reached by AL Kayat Bramley incision. Arthroplasty was done using a bur. The bony mass was detached of its muscle attachments and removed, followed by immediate costochondral grafting.
Results
Pre-operative maximal incisal opening was 7 mm and in the immediate postoperative period was 36 mm, at the end of the follow up period it ranged from 35 to 36 mm.
Conclusion
The articular reconstruction with costochondral grafts for the treatment of TMJ ankylosis is efficient in relation to post-operative maximal incisal opening, recurrence and articular function.

EP-TM-25
Condylar Hyperplasia—A Case Report

Eapen Thomas, Nithin Mathew Sam

Pushpagiri College of Dental Sciences

Abstract
Condylar hyperplasia (CH) can be defined as the excessive growth of one condyle over the contralateral, causing an increase in bone mass of varying degree in instances where the subject^{TM}s growth has decreased or ceased. CH determines the existence of a facial asymmetry. As the degree of asymmetry increases, the subjects determine a greater need for surgery that repairs esthetics and function, indicating that when the chin asymmetry deviates 10 mm from the midline, there is a high demand to correct it surgically; this demand decreases in proportion to the increase in the patient^{TM}s age and to the decrease in the perception of facial esthetics. The treatment options supported by

the literature are: 1) high condylectomy of the condyle with CH, 2) high condylectomy of the condyle with CH and bimaxillary orthognatic surgery, 3) orthognatic surgery of the residual facial deformity or 4) cosmetic procedures associated with orthodontic compensation. I present a poster on management of a case of unilateral condylar hyperplasia by condylectomy on the affected side. Research oriented to know the causes of CH is necessary for better diagnosis and treatment. If the onset and duration could be defined, CH could be treated more safely.

EP-TM-26
Long Standing Temporo-Mandibular Joint Dislocation Literature Review and Case Report

Kapil Malik, A. K. Adhyapok, Subhas C. Debnath

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Abstract
Background temporomandibular joint dislocations (TMJ) that persist for more than a month are labelled as long-standing temporomandibular joint dislocations, and are the most challenging and difficult to treat. The management of this rare entity ranges widely, from closed reduction to complicated surgical procedure. The selection of a proper procedure is controversial. Objective The presentation aims to collate and analyze from literature the different modalities utilized in the surgical management of long standing TMJ dislocation, the reasons for the choice of a particular surgical procedure, various proposed treatment algorithms and reports 3 such treated cases. Methodology Search engines and medical databases like Ovid, Medline, Pubgate, Researchgate, PubMed, Google etc. were tapped for information related to the subject. The search word long-standing; dislocation; condyle; TMJ were employed for retrieval of data. Analysis of the treatment modalities, the reason for the selection of a particular modality was done. Results the review resulted in a total of 18 articles on the subject from the sources mentioned above. The choice of procedure seems to be determined entirely by the preference of the operator/s. Conclusion There are currently no guidelines or protocols for which surgical method is best and for which situations. Few treatment algorithms were proposed by authors but adequate documentation and follow up need to be established to statistically analyze the results and proclaimed successes of various treatment modalities.

EP-TM-27
Role of Disc Preservation and Lateral Capsular Reconstruction in Treatment of TMJ Ankylosis—A Case Report

M.Baskaran, C. Suresh

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Abstract
Background
Ankylosis of the temporomandibular joint (TMJ) is an intracapsular union of the disc-condyle complex to the temporal articular surface that restricts mandibular movements, including the fibrous adhesions or bony fusion between condyle, disc, glenoid fossa, and eminence.
Objective
To restore the structure and function of TMJ by utilising remnants of articular disc as an interpositional gap arthroplasty as well as reconstruction of lateral capsule with temporalis myofacial flap.
Methodology
This report describes a case of a 21 year old man with limited mouth opening, diagnosed with post traumatic left bony TMJ ankylosis. The surgical approach consisted of interpositional gap arthroplasty with remains of the disc over the condylar stump and sutures it with temporalis myofacial flap which was used for lateral capsule reconstruction followed by vigorous physiotherapy.
Results
No major complications were seen after surgery. Interincisal distances have significantly widened following mouth opening exercises for 6 months.
Conclusion
By restoring the normal structure of the TMJ and preservation of the disc, recurrence of post traumatic TMJ ankylosis can be prevented.

EP-TM-28
Use of Dernal Fat Graft as Interpositional Graft in Recurrent TMJ Ankylosis

Sushmita Mitra, Kalyani Bhate, Santhosh Kumar

D. Y. Patil Dental College & Hospital, Pune

Abstract
Background
Temporomandibular joint ankylosis (TMA) is a highly distressing condition which can be described as a fusion of joint surfaces in which TMJ is replaced by scar tissue. The most commonly surgical approach used to restore normal joint functioning is a gap arthroplasty associated with the temporal muscle flap (TMF) as interpositional material. But inspite of using TMF there are cases of recurrence. Thus, we are presenting an alternative procedure using a dermal fat graft as interpositional graft for the gap arthroplasty. Objective: To present an alternative method of using dermal fat graft as interpositional graft in recurrent Temporomandibular joint ankylosis (TMA). Methodology: We are presenting a series of three cases of recurrent TMJ ankylosis in which we used dermal graft as interpositional graft with a follow up of six months.
Results
The maximal opening in the pre-operative period ranged from 0 to 2 mm and at the end of the follow up period it ranged from 20 to 35 mm. Conclusion: The use of thick dermal graft as interpositional graft in treatment of TMJ ankylosis is an efficient alternative to routinely done temporal muscle flap.

EP-TM-29
Treatment of TMJ Ankylosis In Children With Interpositional Gap Arthroplasty Followed By Functional Therapy With Myofunctional Appliance

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PMNM Dental College and Hospital, Bagalkot, Karnataka

Abstract
Background
TMJ ankylosis in children is one of the most challenging problems managed by oral surgeons. Post conventional surgery the mandible still remains retrognathic which is not functionally efficient and

esthetically not right for the patient. To treat this different surgical approaches such as distraction osteogenesis/callotasis to legnthen the mandible, orthomorphic surgeries which are a type of orthognathic surgery in which the occlusal aspect is untouched and functional approaches such as myofunctional appliance therapy which reshapes the condyle and moulds the temporomandibular muscular apparatus to modify the growth of the mandible in straight and symmetrical direction.

Objective

The objective is to show the favourable result of combined surgical approach like interpositional gap arthroplasty with dermal skin graft/temporalis flap and post surgical functional therapy with myofunctional apliances like frenkel's and twin block Methodology-in 3 child patients operated for ankyloses and given started on functional therapy with long term follow up.

Result

Favourable results esthetically and functionally were noticed.

Conclusion

In pediatric patients complete treatment of treating the problem of ankylosis and then correcting its residual defects involves both surgical intervention and after that directioning the growth of mandible and TMJ apparatus with functional therapy.

EP-TM-30
Various Treatment Modalities In Management of TMJ Ankylosis

Harshita Mathur

Jodhpur Dental College General Hospital

Abstract

Temporomandibular joint (TMJ) ankylosis is defined as osseous or fibrous fusion of the condyle of the mandible and the mandibular fossa of temporal bone. It is mainly caused by trauma, systemic diseases or infections. It is characterized by difficulty or inability to open the mouth resulting in facial deformity, malocclusion and dental problems. The only treatment option for TMJ ankylosis is surgical with or without condylar reconstruction followed by physiotherapy. Various grafts are available for condylar reconstruction after removing the ankylotic mass such as autogenous grafts like costochondral, sternoclavicular, posterior border of mandibular ramus, fibular, coronoid process, temporal fascia, temporalis muscle flap and metatarsophalangeal, alloplastic grafts like hydroxyappatite collagen, acrylic silicone, TMJ prostheses and recently condylar distraction osteogenesis. Different techniques have been developed over period of time but recurrence still remains the major problem when treating TMJ ankylosis. The purpose of this poster is to showcase various treatment modalities in management of TMJ ankylosis.

EP-TM-31
Disc Anchoring With An Orthodontic Mini-Screw For Chronic Meniscocondylar Dislocation of TMJ

V. Vidya Devi

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Abstract

Background dislocation of the temporomandibular joint (TMJ) is the excessive forward movement of the condyle beyond the articular eminence. Most surgical treatment options aim to reduce or block the condylar translation. Only a few procedures primarily address the disc per se. We describe a technique for the treatment of chronic meniscocondylar dislocation by anchoring the disc to the condyle using an orthodontic mini-screw. Objective the purpose of this study was to evaluate the efficacy of disc re-positioning and anchorage with an orthodontic mini-screw for the treatment of chronic meniscocondylar dislocation. Methodology this study was conducted on 17 patients suffering from chronic dislocation of the temporomandibular joint, with mri-proven meniscocondylar dislocation. After surgical exposure, the disc was plicated to the condyle with an orthodontic mini-screw, fixed to the posterior aspect of the condylar head results: all the patients showed improvement in their symptoms of dislocation in the postoperative period. None of the patients had any recurrence till the 1-year followup. Conclusion: our procedure addresses the fundamental etiology of meniscocondylar dislocation by anchoring the disc to the condyle, using an orthodontic mini-implant and correcting the condyle disc disharmony. This technique is reliable, technically feasible, and cost-effective in the indian set up.

EP-TM-32
Autohaemotherapy—A Conservative Approach For Recurrent TMJ Dislocation

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Palak A. Umadiya

Abstract

TMJ dislocation is a distressing condition characterized by locking of mandibular condyle anterior to articular eminence and inability to close the mouth, commonly seen in elderly causing further distress in already stressed patients. Various surgical and non-surgical modalities have been described in literature by various authors but there is no definite consensus regarding superiority of any treatment over other. The purpose of this poster is to show use of autologous blood in recurrent TMJ dislocation. This mehod is simple, rapid, minimally invasive and cost effective technique with low possibility of complication and is a feasible alternative treatment before surgical intervention. Keywords: TMJ dislocation, TMJ Luxation, Autohaemotherapy, Autologous blood injection in TMJ.

EP-TM-33
Comparison Between Corticosteroids and Sodium Hyaluronate With Corticosteroids After Arthrocentesis In The Treatment of Internal Derangement of TMJ Using Single Puncture Technique"

Girish. B. Giraddi and Ankush mahajan

Government Dental College and Research Institute, Bangalore

Abstract

Background

This study was designed to compare the intra-articular injection of Betamethasone and sodium hyaluronate (combination) with betamethasone alone after arthrocentesis using single puncture technique into the upper joint space in the treatment of temporomandibular joint (TMJ) internal derangements.

Objectives
To establish efficacy of intra-articular drug, evaluate the incidence of complication and local side effects after treatment and to demonstrate the TMJ arthrocentesis " using dual needle device with single puncture technique.
Methodology
14 patients with internal derangement were randomly selected and divided into 2 groups (7 in each group).Arthrocentesis with single puncture technique of the upper joint space was then performed using Ringer lactate under local anaesthesia, followed by injection of either betamethasone and sodium hyaluronate combination or betamethasone alone into the joint. Clinical data was collected in the form of pain (visual analog scale), maximum mouth opening, and joint sound before and after treatment up to 6 months.
Results
At the follow up of 6 months, there was statistically significant decrease in intensity of pain and increase in mouth opening was seen in betamethasone and sodium hyaluronate combination group compared to betamethasone alone group. Although there was statistically significant difference between the two groups when clicking was evaluated in the initial time interval (2nd post op day), on follow up of up to 6 months there was no statistically significant difference in clicking.
Conclusion
Although patients benefitted from both techniques, arthrocentesis with intra-articular injection of betamethasone and sodium hyaluronate combination is superior to arthrocentesis with betamethasone injection alone.

EP-TM-34
Efficacy of Temporalis Fascia In TMJ Ankylosis

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Abstract
Aims & Objective
Management of TMJ ankylosis involves rehabilitation of mandibular function, prevention of relapse and promotion of mandibular growth. To achieve these goals requires adequate resection of ankylotic mass & placement of appropriate inter-positional graft. Various inter-positional graft can be used like Temporalis fascia, Temporalis muscle, Costochondral graft, Dermis fat graft etc. This study concludes efficacy of temporalis fascia used in inter-positional arthroplasty for management of TMJ ankylosis.
Material & Method
Ten cases of bony ankylosis in adult patients managed with kabans protocol. Mouth opening was measured preoperatively, intra-operatively and postoperatively. Mean preoperative mouth opening was 4.0 mm. All the cases were operated & mean intra operative mouth opening achieved was 37.5 mm. Early mobilization and aggressive physiotherapy for a period of one year was carried postoperatively.
Results
Mean Post-operative mouth opening was 35.1 mm after one month, 35.8 mm after six months, 36.6 mm after one year follow up.
Conclusion
Our study concludes that interposition of temporalis fascia in TMJ ankylosis produced good results in mouth opening and jaw function and is reliable method to prevent recurrence of ankylosis and achieve long term good results.

EP-TM-35
Tenosynovial Giant Cell Tumor of the Temporomandibular joint: A case report

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Abstract
Tumours of the TMJ are exceedingly uncommon and because the symptoms are aspecific and challenging to interpret, diagnosis is often late. Tumours may arise in the TMJ or in secondarily involved surrounding tissues. Tenosynovial giant cell tumour (TGCT) is a rare benign proliferative disorder of the synovium characterised by destructive invasion by synovial-like mononuclear cells. TGCT, together with pigmented villonodular synovitis (PVNS), belongs to a group of proliferative lesions affecting the synovial membrane and the tendon sheath. Both the lesions rarely manifest in the head and neck region. One such case is being reported. Case Report a 26 year male patient reported with the complaint of pain and swelling in right pre tragic region since 3 months. Patient had history of swelling and pain in the same region 5 years back, for which patient had undergone surgery of Curettage of right condyle and superficial Parotidectomy at Government Medical institute. Then, histopathology report showed normal salivary gland tissue and Benign Giant cell tumor of condyle. Apparently, lesion healed progressively and patient was asymptomatic until 3 months back when he noticed similar swelling and associated pain. Radiological examination revealed multilocular radiolucency in right condyle and coronoid region with loss of their anatomical shape and increased joint space. Surgical resection of right condyle and coronoid was done and reconstructed using costochondral rib graft. Histopathological diagnosis report was Tenosynovial Giant cell tumor with chondroid metaplasia. Patient is asymptomatic after 3 months follow up.

EP-TM-36
Management of Temporomandibular Joint Hypermobility Using Indigenous Alloplastic Implant—A Case Report!!!

Roy Chowdhury, Vishal Kulkarni

Armed Forces Medical College

Abstract
Hypermobility of the temporomandibular joint is one of many pathophysiologic joint conditions that the oral and maxillofacial surgeon is challenged with managing. Although not particularly common, managing a dislocated or a hypermobile joint will inevitably be the challenge of most surgeons or physicians, whether in private or academic practice. There are various strategies practiced since recent times that involve minimially invasive to open surgical techniques. The use of blocking procedure has provided success in tackling this disorder, such as Dautery^{TM}s, Le Clark and the Norman^{TM}s procedure. The present case is unique owing to the fact that multiple surgeries have been carried out in order to block the hypermobile condyle with little success, hence an indigenous alloplastic implant was fabricated at the Department of Oral and Maxillofacial Surgery at a tertiary level teaching hospital using ploymethylmethacrylate and creating a pseudo-eminence to improve the condition of the individual on side of the joint (left) followed by application of Norman^{TM}s procdure over the other (right) side.

EP-TM-37
Auricular Cartilage Graft as An Interpositional Material in Temporomandibular Joint Ankylosis

Nisarg Patel

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Abstract

Background and Objective

Recurrence is a major problem after release of temporomandibular joint (TMJ) ankylosis. The object of this study was to evaluate the efficacy of auricular cartilage graft as an interpositional material in preventing relapse and to assess the long term donor site morbidity of auricular cartilage. Methodology: Ten patients with unilateral TMJ ankylosis were treated with autologous auricular cartilage graft as an interpositional material after arthroplasty. With 2 years of follow-up, postoperative mouth opening, postoperative complication and TMJ function were evaluated.

Results

At 2-year follow-up, none of the patients had relapse, graft rejection, external ear infection or any external ear deformity postoperatively and the function of the TMJ well restored. Conclusion: Auricular cartilage graft is an ideal interpositional graft material for TMJ ankylosis due to its unique textural and physiologic property, its easy procurement, minimum donor site morbidity, prolonged survival rate, its metabolically inert nature and its morphologic simulation to the disc which makes this graft a material of choice and gives the graft an edge over other graft materials.

EP-TM-38
Comparison Between Gap Arthroplasty and Interpositional Arthroplasty

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Abstract

Comparison between Gap arthroplasty and interpositional arthroplasty.

Background

Temporomandibular joint ankylosis is a debilitating condition. It is the fusion of articular surface of glenoid fossa and condyle with bony or fibrous tissue. It may be caused by trauma, infection, degenerative joint disease, prolonged mandibulomaxillary fixation, inflammatory conditions.

Objective

The objective of this case study is to compare and evaluate the treatment outcomes of Gap arthroplasty and interpositional arthroplasty in management of TMJ ankylosis.

Material and method

Twenty patients with TMJ ankylosis with age ranging from 5 to 25 years were included in this study and were divided into two groups. In group I, gap arthroplasty was performed and in group II, interpositional arthroplasty with temporalis facia was performed.

Discussion

Trauma to the TMJ may become a trigger of subsequent fibrous or bony ankylosis. Temporalis fascia plays an important role and act as a barrier and prevents ankylosis. The present study is conducted to evaluate the better surgical technique in reference to mouth opening and low rate of reankylosis. Conclusion There is no significant difference between the patients treated with gap arthroplasty as well as inter positional arthroplasty. The overall outcome of the treatment depends on patient cooperation, active physiotherapy and regular follow up of long duration.

EP-TM-39
Arthroscopically Assisted Disc Repositioning of Non Reducing Anteriorly Displaced Disc

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M.A. Rangoonwala College of Dental Sciences

Abstract

Arthroscopically Assisted Disc Repositioning of Non Reducing Anteriorly Displaced Disc.

Background and Objectives

Arthroscopy is a technique for direct visual inspection of internal joint structures, including biopsy and other surgical procedures performed under visual control. Onishi in 1970 was the first to report arthroscopy of the human temporomandibular joint. TMJ arthroscopy has been variously reported as successful in up to 80 % of cases where outcome of arthroscopic surgery to the TMJ correlates with the stage of internal derangement. Methods and materials Patient with non reducing anterior disc displacement and complaining of severe pain in TMJ. Procedure was performed using TMJ arthroscope.

Results

The outcome of surgical procedures was determined using clinical assessment in terms of the need for postoperative medications, the improvement in the painless range of mandibular motion measured by the maximum inter-incisal distance in millimetres, objective outcome was assessed by joint noise, joint pain. Functional jaw pain was evaluated by using a visual analog scale. Conclusion Arthroscopically assisted disc repositioning technique is an effective surgical method not only for diagnostic purpose but also for the improvement of joint function and reduction of pain. It is cheap and easier than other diagnostic tools like MRI. Keywords Arthoscope, internal derangement

EP-TM-40
TMJ Ankylosis

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AECS Maaruti College of Dental Sciences

Abstract

Limitation of mouth opening can be caused by bony or fibrous ankylosis of temporomandibular joint. The gold standard surgery of TMJ ankylosis today is represented by shaving articular surface and subsequent arthroplasty with or without temporal muscle myofacial flap interposition where as use of alloplastic salistic material could be associated to an increased persistance of local symptoms and higher risk of foreign body granuloma and it may favour ankylosis relapse and hinder rehabilitation

EP-TM-41
Total Alloplastic Temporomandibular Joint Reconstruction for Management OF TMJ Ankylosis

Effie Edsor

Meenakshi Ammal Dental College

Abstract

Introduction

Temporomandibular joint (TMJ) ankylosis involves the fusion of the mandibular condyle to the glenoid fossa, the skull base. It is a serious and disabling condition that may cause problems in mastication, digestion, speech, appearance and hygiene. The treatment for ankylosis poses a significant challenge because of high incidence of recurrence. As the prevalence of TMJ ankylosis is more among lower socioeconomic group, an indigenous total TMJ prosthesis is designed to keep the cost to a bare minimum. Alloplastic temporomandibular joint (TMJ) prosthesis can provide an accurate adaptation to the anatomical structures of each individual patient being fabricated on streolithographic model and are a reliable alternative in the treatment of joint reconstruction, providing a cost effective approach with low morbidity and excellent functional outcomes.

Material and methods

This is a prospective study on 9 patients (6 bilateral and 3 unilateral) with TMJ ankylosis (15 joints) carried out between 2012 and 2015, who all underwent reconstruction of temporomandibular joint following arthroplasty with indigenous alloplastic joint at the department of oral and maxillofacial surgery at Meenakshi Ammal Dental College and Hospital.

Results

The overall outcome of our patients shows 75 % of good outcome, and 25 % poor outcome, that too due to infection because of breach of skin in external auditory canal.

Conclusion

This study is probably a maiden attempt of fabricating indigenous total temporomandibular joint prosthesis in our country. There is an absolute necessity to do this keeping in mind its high requirement at an affordable cost.

EP-TM-42
Platelet Rich Plasma In Temporomandibular Joint Osteoarthritis

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Abstract

Osteoarthritis is characterized by the gradual degeneration of cartilage and subchondral bone due to mechanical strain on joints, intraarticular joint disorders, or arthritic disease. Advanced degeneration manifests through flattening of the condyle, joint protuberances, erosion, and disc perforation. Characteristic clinical symptoms of OA include pain, restricted jaw movement and joint noise, particularly grating or grinding. Treatment for OA of the Temporomandibular Joint consists of the elimination of possible causal factors, conservative treatment (occlusion splints) and minimally invasive treatment [arthrocentesis, corticosteroids, or Hyaluronic Acid (HA) injections]. Platelet-rich plasma has been used medicinally since the 1970 s and is obtained from autologous blood because the platelet concentration in PRP is at least 5-fold greater than that in physiological blood. It contains platelet derived growth factors (PDGFA, PDGFB, PDGFC), insulin like growth factor, fibroblast growth factor, epidermal growth factor, vascular endothelial growth factors (VEGFA, VEGFB, VEGFC). The presence of these GF peptides and their application in high concentrations to damaged tissue, a fracture, or inter-articularly for injured tendons and ligaments help in regeneration of OA-induced changes to cartilage and subchondral bone is the principle behind PRP therapy.

EP-TM-43
Arthrocentesis of Temporomandibular Joint

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Abstract

Arthrocentesis is the method of flushing of TMJ by placing needles into the upper joint compartment using ringer's lactate or physiological saline under LA or sedation-the process is referred to as lysis and lavage. There are two techniques-single needle and two needle. The improvement in quality of joint environment achieved with the lavage seems to be the basis for an explanation of the efficacy of arthrocentesis in treatment of restricted mouth opening

EP-TM-44
T. M. J. Arthrocentesis with or without Duloxetine in T. M. J. Pain: A Comparison

R. K. Singh, Shadab Mohd., U. S. Pal, Anil Nischal, Geeta singh, Kalpana Singh, Pawan Goyal

King George's Medical University, Lucknow

Abstract

Background

Arthrocentesis improves symptoms and restore jaw function in patients with TMJ dysfunction by removing the catabolites of the inflammatory processes and loosening the adhesions as a result of the pressure of the lavage fluid Duloxetine is a selective, relatively balanced serotonin (5-HT) and norepinephrine (NE) reuptake inhibitor (SNRI). Imbalance of 5-HT and NE has been implicated in chronic pain associated with central sensitization. OBJECTIVE: To compare the efficacy of Duloxetine therapy alone or in combination with TMJ arthrocentesis in treatment of painful TMJ.

Methodology

Total 30 patients were included with painful temporomandibular joint reporting to Oral and Maxillofacial Surgery O. P.D. and Trauma Unit of King George Medical University, Lucknow, divided equally into 3 groups. Inclusion Criteria: 1. Patients within the age limit between 18–60 years of age 2. Patients giving informed consent to participate in the study. 3. RDC (Axis II), psychological and psychosocial factors associated with TMJ pain. Group A: 10 PATIENTS All these patients shall be treated with arthrocentesis with Ringer's Lactate solution. Group B: 10 PATIENTS All these patients shall be treated with only Duloxetine therapy (30 mg twice) orally for 3 months. Group C: 10

PATIENTS All these patients shall be treated with combination of TMJ arthrocentesis with Duloxetine therapy (30 mg twice) orally for 3 months.

Results

Patients treated with combination of TMJ arthrocentesis with Duloxetine therapy had less pain, swelling, increased interincisal opening over group A & group B patients.

Conclusion

Combination of duloxetine with arthrocentesis has advantage definitely over plain arthrocentesis & it can be used promisingly in treatment of TMJ pain.

EP-TM-45
Endoscopic Approach To The Condylar Region

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Abstract

There are various approaches for the treatment of condylar regions of the mandible. The conventional procedures include Preauricular approach, Alkayet–Bramley approach, Retroauricular approach, Coronal approach. Most of the approaches have the risk of damaging the branches of the facial nerve and also producing unesthetic scar. Recent advances in technology have led to the emergence of minimally invasive techniques like endoscopy to be used in various aspect of maxillofacial surgery. Endoscopic procedures have broadened the frontiers of our speciality. There are many advantages of using minimally invasive technique such as better healing, less postoperative healing time and better patient compliance. Many aspects like trauma, esthetic procedures, TMJ disorders, pathologies can be adequately diagnosed and also treated with less of complications. Endoscopic observation assures that anatomical structures, like the inferior alveolar nerve, maxillary sinus, are avoided and preserved. Generally assessment of bone quality and quantity is based only on radiographic evaluation. Thus, additional qualitative objective methods for evaluating bone quality are needed, and indeed, endoscopic observation of the site can determine the quality of bone.

EP-TM-46
New Surgical Classification of TMJ Disorders

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Abstract

Accurately diagnosing and treating Temporomandibular joint disorders can be a difficult and confusing task and is often true primarily because patients symptoms do not always fit into one classification. In many instances several classifications seems to be appropriate because in reality the patient is suffering from more than one disorder and appropriate intervention or treatment also depends upon a proper classification which includes clinical and radiological features. A new surgical classification for temporomandibular joint disorders using a category scale from 1 to 5, with category 1 being normal and category 5 referring to catastrophic changes to the joint will provide the basis for enhanced quantitative and descriptive data collection that can be used in the field of TMJ surgery research and practice.the aim of this new surgical classification is it includes all TMJ specific disorders that can be applied to future studies related to surgery and treatment planning.

EP-TM-47
Bone Cements

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Abstract

Introduction

The viscosity of bone cement used in total joint arthroplasty is an important for determining the proper handling characteristics of the cement and its interlock with bone. The degree of penetration and, therefore, the integrity of the arthroplasty are dependent on the viscosity of the bone cement system. As yet there is still no standard measurement of the efficacy of each bone/cement system with regard to the ability of the cement to penetrate the interstices of the bone.

Aim

To quantify the rheological properties of bone cement systems with the view to assisting in cement selection for orthopaedic purposes.

Material & Methods

The rheological properties of a variety of current bone cements were determined using a novel apparatus developed at the CSIRO called the Micro Fourier Rheometer (MFR). This device measures the complex viscosity and complex modulus by subjecting a sample to small amplitude oscillatory squeezing between two parallel plates. The force transmitted through the sample is detected by a dynamic load cell and the complete signal spectrum is then analysed using Fourier Techniques. The bone cement is mixed according to manufacturers instructions and placed between the plates and is then subjected to a random displacement. Subsequent Fourier analysis lends itself to rheological parameters such as real and imaginary modulus, viscosity and phase).

EP-TM-48
Simultaneous Maxillo-Mandibular Distraction Osteogenesis For Correction of Facial Asymmetry Secondary To Temporomandibular Joint Ankylosis—Case Report

Rohit Kumar

GDCH Ahmedabad

Abstract

Background & Objectives

To assess the feasibility of using simultaneous maxillary and mandibular distraction osteogenesis for correction of facial deformities after releasing the ankylosed temporomandibular joint. To correct

the facial asymmetry with preservation of the preoperative acceptable functional dental occlusion.

Methodology

Depending on the degree of asymmetry and deformation, the surgical procedure may vary in complexity and extent. Facial asymmetry and functional problems due to dentofacial discrepancy and soft tissue disparities are commonly managed by orthognathic surgery and augmentation procedures. In severe cases, the soft tissue structures on the affected side may constitute an incredible resistance to stretching and can make the surgery considerably more difficult and liable to relapse.

Results & Conclusion

Mandibular distraction in adult patients with facial asymmetry secondary to hemifacial microsomia and unilateral ankylosis of the Temporomandibular Joint, produces good esthetic results, but also produces severe alterations in the occlusion requiring complex and prolonged orthodontic treatment.

EP-TM-49
Intramuscular Botulinum Injection As An Adjunct To Artherocentesis

Tanmay Dave

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Abstract

Arthrocentesis has been successfully used for the past decade to treat cases of chronic TMJ pain which are associated internal derangements. Many cases of TMJ Derangement are associated with hyperactivity or aberrant activity in the muscles, which increases loading of the joints. This overloading, if chronic, may have a role in promoting inflammation and internal derangements of the joint. Adjunctive BTX-A injections may contribute synergistically to the arthrocentesis by providing profound relaxation to the masticatory muscles. Reducing the maximum contractile force of the masticatory muscles with BTX-A does result in a reduction in overall pain, an improvement in function, and improved range of movement.

EP-TM-50
Arthrocentesis of Temporomandibular Joint: Single Versus Double Needle Technique

Mohammad Shaqib

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Abstract

The aim of the study was to compare the effectiveness of five weekly two needle arthrocentesis in the same protocol performed with a single needle technique in patients with inflammatory degenerative disorders of the temporomandibular joint (TMJ). Patients with TMJ osteoarthritis were randomly assigned to the two needle or single needle protocol and followed up for 6 months after treatment. Several outcome parameters, such as maximum pain at rest and maximum pain on chewing, subjective chewing efficiency, limitation in jaw function, jaw range of motion in mm, were recorded at baseline and multiple follow up assessments. Both treatment groups recorded significant improvement with respect to baseline levels in almost all outcome variables. The rate of improvement was not significantly different between the treatment protocols in any of the outcome variables. The present investigation did not support the existence of significant differences in the treatment effectiveness for inflammatory degenerative TMJ disorders of a cycle of five weekly arthrocentesis performed according to the classical twoneedle or the singleneedle technique.

EP-TM-51
Is TMJ driving the face off balance? Facial Asymmetry due to TMJ Diagnosis and Treatment Strategies

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Nair Hospital Dental College

Abstract

"A pleasant symmetrical face is of utmost importance in a human body to be attractive". Various facial patterns lend a unique identity to the person. It is the harmony and symmetry of each segment, which contributes toward the total beauty of the face. Any abnormal deviation brings about an unpleasant facial appearance, with a disturbance in both aesthetics as well as function. TMJ disorders and pathology are common causative factors for, or the result of, facial asymmetries. Condylar underdevelopment or condylar resorption can cause the mandible and face to be smaller on one side and shift toward that side. On the other hand, a unilateral condylar enlargement can cause overdevelopment of the mandible and associated structures, causing facial asymmetry. Management of such asymmetries includes removing the etiological factor and correcting the asymmetry by Distraction and/or Orthognathic Surgery. Here we present six such cases treated at our department with successful and stable results.

Others (code EPO)

EP-O1
Bone Grafts In Oral and Maxillofacial Surgery

Dipika Raghaw

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Abstract

Bone defects in cranio-maxillofacial skeleton vary from small periodontal defects to the large segmental defects resulting from trauma, surgical excision or cranioplasty. Such defects typically have complex three dimensional structural needs, which are difficult to restore. Segmental jaw defects require restoration of mechanical integrity, temporomandibular joint function, intermaxillary dental occlusion as well as facial esthetics. Bone grafts remain the gold standard for reconstructing segmental bone defects. Bone graft is defined as any implanted material that alone or in combination with other materials

promotes a bone healing response by providing osteogenic, osteoinductive or osteoconductive properties. Grafts may be broadly classified as Autogenous, Allogenic, isogenic or xenogenic grafts.- Bone grafts used in maxillofacial surgery are Illiac grafts, costochondral grafts, stenoclavicular grafts, fibular grafts, grafts from chin. Each of the above mentioned grafts have their own advantages and disadvantages. Here we present a brief review of the various bone grafts used in oral and maxillofacial surgery.

EP-O2
Guidelines of Management of Haemophiliac Patients Undergoing Oral and Maxillofacial Surgery Cases

Partha Sundar Biswas

Guru Nanak Institute of Dental Sciences and Research

Abstract
Haemophilia is an X-linked congenital bleeding disorder with a frequency of about one in 10,000 births. Haemophilia is caused by a deficiency of coagulation factor VIII (FVIII) (haemophilia A) or factor IX (FIX) (haemophilia B) related to mutations of the clotting factor gene. Males are sufferer and females are mostly carrier. Very often surgeons encounter per and post-operative problem in both minor and major surgical procedure. So treating the haemophiliac patient is a great challenge to surgeons. Accurate diagnosis is important and essential for effective management. Prevention of bleeding should be the goal. We have to treat patient according to the severity level which can be estimated by measuring the level. A surgeons have to be cautious regarding the surgical procedure irrespective of anaesthesia being used, and do extraction as atraumatically as possible. Apart from this local haemostatic measure have to be taken along with transfusion of Recombinant factor VIII/ FFP /cryoprecipitate or DDAVP as per factor VII and factor IX level.

EP-O3
Bilateral Sagittal Split Osteotomy

Abhisek Das

Gurunanak Institute of Dental Science and Research

Abstract
Orthognathic surgery involves the surgical correction of the components of the facial skeleton to restore the proper anatomical and functional relationship in patients with dentofacial skeletal abnormalities. An important component of orthognathic surgery is the bilateral sagittal split osteotomy (BSSO). The technique has been in practice since the late 1800 s, but did not reach widespread acceptance and use until several modifications were described in the 1960 s and 1970 s. Those modifications came from a desire to make the procedure safer, more reliable, and more predictable with less relapse. Those goals continue to stimulate innovation in the field today and have helped the procedure evolve to be a very dependable, consistent method of correction of many types of malocclusion & asymmetry. The operative surgeon should be well versed in the history, anatomy, technical aspects, and complications of the bilateral sagittal split osteotomy to fully understand the procedure and to counsel the patient. Indications for a bilateral sagittal split include horizontal mandibular excess, deficiency, and/or asymmetry & occlusion correction in trauma.

EP-O4
Laser in Oral & Maxillofacial Surgery

Rajesh Khandelwal

Govt. Dental College, Indore

Abstract
Light Amplification By Stimulated Emission of Radiation First laser was developed by Theodore Maiman in 1966. Lasers not only enhance the current surgical options for treatment, but also have expanded the scope of practice. Over the past few decades, the use of lasers in oral and maxillofacial surgery has been increased dramatically. Their use within the specialty not only has enhanced current surgical options for treatment, but also contributed to a variety of new procedures. There are many advantages to the use of lasers in OMF surgery likes hemostasis and excellent field visibility, precision, enhanced infection control and elimination of bacteremia, lack of mechanical tissue trauma, reduced postoperative pain and edema, reduced scarring and tissue shrinkage, microsurgical capabilities, less instruments at the site of operation, asepsis due to non-contact tissue ablation and prevention of tumor seeding. Despite many advantages, there are disadvantages that must be carefully weighed before choosing the laser for patient treatment. Because of their many advantages, lasers have become indispensable in OMFS. The aim of this poster is to describes the uses, advantages, disadvantages of laser in OMFS

EP-O5
Stem Cells in Oral & Maxillofacial Surgery

Abhishek U Gajare

Bharati Vidyapeeth Dental College and Hospital. Sangli

Abstract
Background
The use of stem cells in maxillofacial surgery is less discussed. Literature review is sparse and limited on the current methods that have been performed. Objective: The aim of this poster is to provide an overview of clinical applications of stem cells in maxillofacial surgery. Methodology: Going through the literature tremendous scope exists for application of stem cells in routine maxillofacial practice. This not only includes a variety of different stem cell sources, but also a plethora of bony defects requiring reconstruction. The source of stem cells for tissue regeneration depends on the structure that is to be replaced. Mesenchymal stem cells fulfil the essential criteria.
Results
Using stem cells large bony defects, bone regeneration, nerve regeneration, distraction osteogenesis, irradiated mandibles and healing of bony defects has been achieved. Conclusion: This poster will demonstrate the use of stem cells in routine clinical practice for oral and maxillofacial surgeons

EP-O6
Management of Patient Under Anticoagulant Therapy In Oral and Maxillofacial Surgery

Abhisek Chatterjee

Guru Nanak Institute of Dental Science and Research

Abstract
Growing number of patients are taking anticoagulant for prevention of atrial and venous thrombosis. Management for these patients at the time of elective or emergency surgery is very much important which involves balancing the risk of atrial and venous thromboembolism such as ischemic stroke, myocardial infraction, pulmonary embolism or deep vein thrombosis, with per and postoperative bleeding. There are different protocols for management of such patients who are undergoing elective or emergency surgeries. This poster wants to address the pre, per and postoperative management in this regard.

EP-O7
Role of EMLA Cream In Reducing Venipuncture Pain

Rajat Pareek, Dinesh Kumar Verma, Shallu Bansal

Surendera Dental College and Research Institute

Abstract
Venipuncture is commonly seen as one of the most painful and frequently involved invasive procedure. surgical pain management starts at venipuncture in oral surgery procedure. Reducing patient pain is very important for many reasons & unnecessary pain can erode doctor patient relationship. A less painful venipuncture may lead to less difficulty and higher success rate. In 1984, sweetish researcher compounded a topical cream (EMLA) with the unique ability to produce dermal anaesthesia through intact skin. The cream is composed of two anaesthestic 2.5 % lidocaine & 2.5 % prilocaine. It is generally applied 45–60 min before painful procedure. various other agents have been used to reduce venipuncture pain like Ethyl chloride, lidocaine with bicarbonate etc. Here we are going to present poster on EMLA cream in reducing venipuncture pain.

EP-O8
Reappraisal of the Role of Peripheral Neurectomy in the Treatment of Trigeminal Neuralgia—A Systematic Review

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Abstract
Objectives
To evaluate the effectiveness of peripheral neurectomy in the management of trigeminal neuralgia in terms of the pain relief and recurrence in comparison with other neurosurgical procedures, To evaluate the duration of pain relief, complications and to evaluate the most common indications for this procedure.
Selection of Studies
27 studies were selected from a search in the Cochrane, PUBMED, MEDLINE Databases from the years 1948 to 2015. Prospective and Questionnaire studies were included, retrospective studies, case reports and reviews were excluded; A working analysis was performed for each individual outcome based on a consolidation of the available quantitative data.
Results
A total of 6077 patients were included. The results showed a pain relief percentage of 61.69 %, 86.44 % and 73.22 % with the duration of pain relief being for 2 years, 3 years and 10 years for peripheral, percutaneous and central procedures respectively. The recurrence rates and rate of complications were 17.96 %, 3.27 %, 15.34 % and 57 %, 69.03 %, 1 % respectively for peripheral, percutaneous and central procedures.
Conclusion
Peripheral neurectomy is associated with lesser pain relief and earlier recurrence rates with the recurrence appearing earlier with repeat neurectomies. Central procedures provide with the longest duration of pain relief and percutaneous procedures are associated with the highest complication rates. Performing a peripheral procedure initially does not alter the success of central procedures but is associated with increased rate of burning and aching facial pain and morbidity. There seems to be no age factors related to the justification for the performance of any surgical procedure.

EP-O9
CT Scan in Oral and Maxillofacial Surgery

Monika Gupta

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Abstract
CT Scan in Oral and Maxillofacial Surgery Abstract The diagnostic value of CT scan in Oral and Maxillofacial Surgery is progressively increasing. Middle third fracture are difficult to diagnose with conventional radiography due to superimposition of complex bony structures.CT scan is very useful in such cases for the pre-operative assessment of the fracture, its relationship to the deeper structures, treatment planning and post traumatic surgical reconstruction. It is also very useful in the assessment of pre-operative extent of the lesion, benign or malignant, cyst, odontogenic space infection as well as their course. It is also helpful in determining the nature of the lesion whether fibrous or vascular including soft tissue lesions. CECT (Contrast Enhanced CT) helps in assessment of cancers of oral cavity along with metastatic involvement of lymph node.

EP-O10
Correlation between Orofacial Architecture and Severity of Obstructive Sleep Apnea

Aditi

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Abstract
Background
Obstructive sleep apnea (OSA) is a condition that remains undiagnosed for a large number of population than thought. Prevalence of OSA is around 0.3 % to 5.1 % world over and affects around 4.4 % to

13.7 % of India's population. The etiology remains multi-factorial. The association of orofacial structures have been studied in the past but their role in assessing the risk and diagnosis for OSA has been limited.

Objective

Aim was to determine the relationship between the orofacial architecture and the severity of OSA in South Indian population with no evident cranio-maxillofacial deformities. Methodology: A prospective cross sectional study was designed. A total of 200 patients who had undergone a nocturnal polysomnograhpy test were recruited for the study and subjected to lateral cephalogram. Total of 14 cephalometric variables were compared between three apnoea/hypopnoea index (AHI) groups and univariate and multivariate analysis between these variables and AHI were performed.

Results

The patients were predominantly men (84 %) with a mean age of 47.1 years. Mean BMI and AHI were 29.4 kg/m2 and 27.2. Six cephalometric variables showed significant correlation between the groups.

Conclusion

Caudalization of the hyoid bone, the retropharyngeal space and the length of the mandible were the most important factors. This could serve as a valuable tool to understand the etiology and evaluate the risk of disease and in turn help in early diagnosis and better treatment planning by correcting and improving the abnormal orofacial structures. This may also minimize the medical complications of this disorder.

EP-O11
Versatility of Platelet Rich Fibrin (PRF) Gel As A Healing Aid In Minor Oral Surgical Procedures

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Abstract

Platelet Rich Fibrin (PRF) is a blood derived product obtained by centrifugation of blood. PRF gel contains high amount of growth factors and immune factors that aids in healing process after minor oral surgical procedures. Moreover it is an autologous gel material, so well accepted by the tissues. It is cost effective as it is obtained from patient's own blood. It can be used as a healing aid in minor oral surgical procedures like tooth extraction, surgical removal of impacted tooth, along with implant placement, in small cystic cavities, after alveoplasties and in surgical procedures of systemically compromised patients. Thus PRF gel can be used as a versatile, cost effective and autologous healing aid.

EP-O12
Piezosurgery in Oral and Maxillofacial Surgery

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Abstract

Piezosurgery is a term used for a collection of ultrasonic technology devices, that apply electric vibrations, resulting from pressure to cut bone tissue during surgical procedure and named after piezoelectricity, which is type of electricity these machines use. It is a recently developed innovative system for highly precise and safe cutting of bone, with modulated/ oscillations produced by piezoelectric effect. The piezosurgery has been developed to overcome the limits of precision and intraoperatory safety existing in traditional bone cutting instruments- rotary drills and saws with high predictability and low morbidity in bone cutting. Piezosurgery handpiece can be modified by changing level of ultrasonic frequency that the electric vibrations produced to cut the bone to accommodate different types of bone density involved. The main advantage of piezosurgery for cutting of hard tissues is that the soft tissues areas are spared.

EP-O13
Role of Ultrasonography In Diagnosis and Treatment Plan In Oral and Maxillofacial Surgery

Sushant Kumar Soni

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Abstract

Background and objective

To illustrate an alternative imaging diagnostic technique for pathologies in maxillofacial region which uses sound waves for viewing the normal and pathological conditions with help of sound wave produced by piezoelectric transducer.

Method

The sound waves are partially reflected from the different layers and tissues of the body wherever density changes.some of the reflections return to transducer which vibrate it and generation of impulse in to digital image.

Result

Ultrasonography is very useful in soft tissue lesion, help differentiate solid and cystic lesion, serial study of response and prognosis and maxillofacial fractures.

Conclusion

Ultrasonography is one of noninvasive diagnostic modalities that can be used at bedside and offers many advantages over other modalities. Sedation and contrast dye are rarely needed. Most importantly it is safe thus is first recommended choice for pregnant women and children.

EP-O14
Recent Advances in Regional Analgesia/Anaesthesia

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Abstract

Although local anesthesia remains the backbone of pain control in dentistry, researches are going to seek new and better means of managing the pain. Most of the researches are focused on improvement in the area of anesthetic agents, delivery devices and technique involved. Newer technologies have been developed that can assist the dentist in providing enhanced pain relief with reduced injection pain and fewer adverse effects. The most important skill required of all dental practitioners is the ability to provide safe and effective local anesthesia (LA). The injection of local anesthetic is perhaps the greatest source of patient fear and inability to obtain adequate pain

control with minimal discomfort remains a significant concern of dental practitioners. The achievement of good local anesthesia requires knowledge of the agents being used, the neuroanatomy involved, and best techniques and devices available. The agents and anesthetic delivery equipments available today provide the practitioner an array of options to effectively manage the pain associated with dental procedures. This poster will enlighten the practicing dentists regarding newer devices and methods of rendering pain control comparing these with the earlier used ones on the basis of research and clinical studies available.

EP-O15
Management of Nerve injury in oral & maxillofacial surgery

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Abstract
Injuries to peripheral branches of the trigeminal nerve is ever-present risk during surgical procedures performed in the oral cavity. The most often affected branches of trigeminal nerve are the Inferior alveolar nerve, the lingual nerve & the infraorbital nerve. These injuries can be devastating for patients because of their effects on speech, mastication, taste sensation, and social interactions. Trigeminal nerve branches injury usually undergo spontaneous regeneration and sensory recovery, but some will result in incomplete regeneration with paresthesia or will result in painful neuropathy-dysesthesia. Advances in microsurgical techniques and better understanding of neuroanatomy have made possible, the surgical repair of selected maxillofacial peripheral nerve injuries, when carried out timely by a skilled surgeon. This poster briefly explains the different types of nerve injury and management of the nerve injury.

EP-O16
Treatment Modality For Oroantral Communication / Fistula

Madhuati Singh, Rohit S, JIJO Jacob

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Abstract
An oroantral perforation is an unnatural communication between the oral cavity and maxillary sinus. These kinds of communications arise mainly after extraction of posterior maxillary teeth due to the close anatomical relationship between the root apices of the molar and premolar teeth and the sinus floor. It must be emphasised that unlike the oro-antral communication (OAC), Oroantral Fistula (OAF) is characterized by the presence of a sinus tract that, if not removed, could inhibit spontaneous healing. Closing this communication is important to avoid food and saliva contamination that could lead to bacterial infection, impaired healing and chronic sinusitis. OAF is apparently more frequent in male than in female subjects. Radiological observations might show a sinus floor discontinuity, sinus opacity, focal alveolar atrophy and associated periodontal disease. OAC closures can be achieved using different flaps which show both advantages and limitations. The most widely employed flaps are of three types: vestibular flap, palatal flap and buccal fat pad Flap (BFP). It is suggested that the buccal flap is best applied in the case of large fistulas located in the anterior region, the palatal flap is suitable to correct premolar defects and the BFP flap for wide posterior OAFs.

EP-O17
Study of PRF With Collagen Sheath As A Dressing Material In Surgically Operated Cases of Oral Submucous Fibrosis-"A Case Report"

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Abstract
Background
Present study focuses on study of PRF as a biological dressing material with collagen sheath in surgically operated cases of OSMF on adequate no. of patients. PRF was chosen due to its unique properties of providing growth factors necessary for healing according to present literature.lot of research has been done on bone healing using PRF.
Objective
To understand utility of PRF for healing of oral mucous membrane along with connective tissue.
Methodology
Present case was operated bilaterally for OSMF, fibrotomy of fibrous bands was done and defect was closed with collagen sheath and underline PRF as a dressing material. Patient was followed up subsequently for 7th day, 15th day, 1st month, 3rd month and 6th month as shown here. PRF Preparation: 10 ml blood is withdrawn from patients vein and is centrifuge in a centrifugal machine for 15 min. at 3000–5000 Rpm speed. PRF thus formed is removed, washed with normal saline and is now ready for use as a biological dressing material in the created defect.
Result
>40 mm post-operative mouth opening achieved. No recurrence of vertical fibrous bands found after six month follow up.
Conclusion
PRF enhances post-operative healing of oral mucous membrane along with connective tissue.

EP-O18
Intraosseous Anaesthesia

Gokkulakrishnan, Sudheer. A

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Abstract
Background
Pain is the most common cause of needle phobia. in order to overcome this many advanced injection techniques was using a small vibrating device to the conventional injection technique.
Objective
To compare a computerized intraosseous anesthesia system with the conventional conventional oral anesthesia techniques and analyze the latency and duration of the anesthetic effect and patient preference.

the depth of the anesthetic effect was sufficient to allow the patients to tolerate the dental treatments.

Conclusion

The described intraosseous anesthetic system is effective, with a much shorter latency than the conventional technique, sufficient duration of anesthesia to perform the required dental treatments, and with a much lesser softtissue anesthetic effect. Most of the patients preferred intraosseous anesthesia. It is significantly reduced pain both during insertion of needle and during deposition of solution when compared to the conventional injection technique

EP-O19
Effect of Platelet Rich Fibrin On Wound Healing Following Tooth Extraction Among Diabetic Patients—A Comparitive Study

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Abstract

Background

Diabetes mellitus is the most common endocrine disorder in the world and are prone to impaired wound healing. Where collagen structure is weakened with impaired blood circulation and neutrophil function. This states the necessity to apply procedures that can accelerate and faster the healing process.

Objective

The aim of the study is to evaluate the effectiveness of PRF in extraction socket healing in diabetic patients.

Methodology

100 Patients with diabetes requiring extraction of two or more teeth were taken up for the study. Each patient was considered as their own control. Following extraction, one socket of each patient was filled with PRF and sutured. The other socket underwent suturing followed by extraction. Both extraction sockets were evaluated for bone fill by RVG. RVG was taken immediately after extraction, and at one week, two weeks, and one month intervals. Soft tissue wound healing was also assessed.

Results

There was good and sufficient amount of bone formed and soft tissue healing in the study group compared to the control group.

Conclusion

The use of platelet rich fibrin, when positioned in the healing site, delivered platelet-derived growth factor, which stimulates soft tissue and bone regeneration. This aided in good wound healing in diabetic patients.

EP-O20
Burn Out Syndrome in Oral&Maxillofacial Surgeons; A Critical Analysis

P. Srikanth

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Abstract

The aim the study was to determined the prevalence of burn out syndrome among Indian oral and maxillofacial surgeons and its relationship with socio demographic, clinical and habit variables. The syndrome was quantify using the maslach burnout inventory {general surgery} which defined burn out as the triad of high emotional exhaustation, high depersonalization and grun field et al. were used to evaluate the presence of the syndrome, which includes age, sex, marital status, number of children.years of professional experience, patients aliened per day, hours worked per week, uses of alcohol, sports practice, hobbies, or vacation period per year.

EP-O21
Role of Endoscopy In Oral & Maxillofacial Surgery

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Sudha Rustagi College of Dental Sciences & Research, Faridabad, Haryana

Abstract

Role of Endoscopy in Oral & Maxillofacial Surgery With the development of miniplate fixation in OMFS in early 70 s, the paradigm of conservative access was shifting to a more radical surgical exposure. Rigid internal fixation of high level facio-maxillary fractures was one of the most outstanding examples. The facial skeletal could therefore be precisely reduced anatomically by using endoscope. In OMFS, the spirit of minimal invasive was initiated by evolving role of TMJ arthroscopy in early 80 s. With the development of instruments & techniques, TMJ arthroscopy has now redefined its position in TMJ disorders by overwhelmingly taking over of the conventional open joint surgery. It became the most popular & acknowledged endoscopic procedure in OMFS. The endoscopic procedure for placement and activation of a distraction device for mandibular advancement has been previously reported. The endoscopic approach to chronic maxillary sinusitis of dental origin is a reliable method associated with less morbidity and lower incidence of complications. Endoscope is used to repair in certain types of facial fractures like orbital floor, isolated zygomatic arch, subcondylar mandible fractures and isolated anterior table frontal sinus fractures. The application of endoscopic surgical techniques to the treatment of craniomaxillofacial fractures not only has decreased the morbidity associated with the surgical approaches but has significantly altered the treatment philosophy for many types of fracture. As by using endoscope requires minimal invasion & accurate reduction & treatment in OMFS, so its use is increasing in OMFS.

EP-O22
Autologous Lipofilling

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Abstract

With the recent recognition of the importance of soft tissue fillers, fat grafting has assumed an increasingly important roles both as adjunctive and a primary procedure in aesthetic and reconstructive surgery. However, fat grafting is not new. Surgeons have been grafting fat since 1893. In 1986, Coleman began to transplant fat into iatrogenic liposuction deformities and subsequently into the face. Even some of his earliest attempts at fat grafting yielded long term structural changes that had every indication of permanence. In recent times, autologous fat transplant has become a standard procedure in

plastic surgery, in both reconstructive and aesthetic surgery of the face like, contour restoration, tumour reconstruction, lip augmentation, wrinkle therapy, lipo-facelifts. However, the longitivity of the graft is questionable and depends on the techniques related to harvesting the graft, refine and transfer the fat. The autologous fat contains mesenchymal stem cells and growth factors like, insulin-growth factor, platelet derived growth factor and vascular endothelial growth factor for angiogenesis, enabling the adipocytes to survive and hence replace the excessive fibrotic tissue that results from scarring process and promotes facial esthetics.

EP-O23
Autogenous Bone Graft-The Gold Standard

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Abstract
Bone grafting is a surgical procedure that replaces missing bone. Statistics point out that it is commonly performed procedure only second to blood transfusion. Healthy and functional bone is a prerequisite for esthetics and function and forms a core area of interest in osseointegrated implants. Bone graft can be autogenous (bone harvested from patient's own body); allografts (cadaveric bone usually obtained from a bone bank); or synthetic bone substitutes like hydroxyapatite, tricalcium sulphate etc) The principles involved in successful bone grafts include osteoconduction, osteoinduction and osteogenesis. Autogenous bone grafts help in all the above principles and thus considered the gold standard in grafting procedures for maxillofacial defects. Autogenous bone becomes Osseo integrated and vascularised at its site of implantation which decreases the chances of infection, displacement and foreign body reactions. This poster depicts various graft harvesting sites such as ramus, mandibular symphysis, tibia, iliac crest etc, and the uses of autogenous bone grafting in maxillofacial defects.

EP-O24
Botox: Beautifying The Beautiful By Broadening Our Horizon

Deepti R. Chablani, Sanjay Joshi, Sima Mazumdar

Terna Dental College and Hospital

Abstract
The ï eld of cosmetic surgery continues to be a rapidly changing and expanding one. An increasing number of patients seek minimally invasive procedures. One of the most requested procedures is use of botulinum toxin type A (BoNTA). Treatment of dynamic rhytids and lines with botulinum toxin type A is effective and produces high rates of improvement with rapid onset and long duration of action. With the understanding of the changes that take place in aging and contribute to photodamaged skin, technologic advances have become more scientifically based. Maxillofacial surgeons have a good understanding of facial anatomy and see patients with aesthetic demands in the peri-oral and facial region frequently. The ability to use Botulinum Toxin as an adjunctive treatment is necessary when working in the ï eld of cosmetic facial surgery and this can be an important extended role of Oral and Maxillofacial Surgeon as a specialist of head, face and neck region.

EP-O25
HSAN—A Case Series Report

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Abstract
Congenital insensitivity to pain is a rare disorder seen in early childhood. Five different types of hereditary sensory and autonomic neuropathy have been identified, to date, with different patterns of sensory and autonomic dysfunction, peripheral neuropathy, clinical features and genetic abnormalities. absence of pain and self mutilation are characteristic findinds of this syndrome. here we present a case series of two patients-a 20 month old boy with hsan type II and a 9 year old girl with HSAN TYPE IV.
Results
There are five types of HSAN. The results of this case seriesreport suggest that early diagnosis and specific dental management for patients with congenital insensitivity to pain are important for prevention of the characteristic oral and dental problems acompany this disorder.

EP-O26
Cadaveric Presentation of Marginal Mandibular Branch of Facial Nerve

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Abstract
Cadaveric Presentation of Marginal Mandibular Branch of Facial Nerve.
Objective
This is a cadaveric presentation of Marginal mandibular Nerve in relation to lower border of the mandible in 20 hemi faces of 10 cadavers.
Materials and Method
Cadaveric dissection was done superficially from hair line till the symphysis region to expose the parotid and submandibular region in order to identify the course of Marginal mandibular nerve. 3 anatomical landmarks on the inferior border of the mandible were identified and labelled and the distance between these landmarks and the nerve were recorded using metal scale.
Results
It was found that in 80 % of the cases marginal mandibular nerve runs inferior to the lower border of the mandible and in 20 % of cases runs superior to the lower border with an average distance of 6–8 mm in relation to anatomical angle, 10–12 mm in relation to antegonial notch and 8–10 mm in relation to mental foramen.
Conclusion
It is always safer to place incision 2 cm below the lower border of the mandible to avoid marginal mandibular nerve damage and its consequences.

EP-O27
Trigeminocardiac Reflex and its Management

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Abstract
The trigeminocardiac reflex (TCR) is defined as the sudden onset of parasympathetic dysrhythmia, sympathetic hypotension, apnea or gastric hypermotility during stimulation of any of the sensory branches of trigeminal nerve, though a physiological response but may occur during oral and maxillofacial surgical procedures including minor surgical procedures like lower 3rd molar extraction and major surgical procedures like lefort 1 fracture. It is characterised by triad of bradycardia, bradypnea and gastric mobility. Therefore, through knowledge about the etiology, clinical features and management is essential to prevent and manage this. This poster illustrates the etiology, pathophysiology, and management of this rare but important phenomena and its relevance in oral and maxillofacial surgery.

EP-O28
Transformers–Changes in Progress

Nandan Rudra Paul

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Abstract
The combined knowdedge of surgery with dental background, exclusively qualifies oral & maxillofacial surgeons to perform facial cosmetic procedures involving functional and aesthetic aspects of the face, mouth, teeth and jaws to boost up a person's social and psycological status. Extensive education and training in surgical procedures involving skin, muscles, bone and cartilage of head and neck region along with whole body, finely attune the oral and maxillofacial surgeons to the need for harmony between facial appearance and function. With the development of advanced medical and surgical devices and biomaterials, many facial cosmetic surgicals are minimally invasive and can be performed in outpatient settings under local anaesthesia and also under intra-venous sedation, and sometimes for extensive procedures like orthognathic surgeries under general anaesthesia. procedures like malar prominence, genioplasty, blepheroplasty, facelift (rhytidectomy), facial and neck liposuction, fore-head and eye brow lift, lip-enhancements, nose correction with rhinoplasty followed by other skin treatments using botox, fillers chemical peels and further reinforced with lasers has really helped maxillofacial surgeons not only transfom faces and appearaces, but also transform lives of people. Thanks to the cosmetic facio maxillary surgeries.

EP-O29
Tracheostomy

Sumit De

Guru Nanak Institute of Dental Science and Research

Abstract
A tracheostomy is a frequently performed surgical procedure and required under emergency or elective conditions. In maxillofacial surgery the indications for tracheostomy include prolonged intubation, facilitation of ventilation support, inability of patient to manage secretion, upper airway obstruction, Blunt neck trauma (fractures of the thyroid or cricoid cartilage, vessel damage, or fracture of hyoid bone), laryngotracheal trauma, large or expanding neck hematomas, edema, deep space infections of neck, Ludwig's angina, lacerations to the floor of the mouth and in some post surgical situations. The procedure involves formation of a surgical opening in the trachea and creation of a permanent stoma between the trachea and the cervical skin followed by inserting a tracheostomy tube in the resulting stoma. The procedure is associated with some complication like Pneumothorax, Tracheal stenosis, Oesophageo-tracheal fistula, Increased bacterial colonization of the airways, Wound infection, bilateral laryngeal nerve injury, injury to internal jugular vein, severe dyspnoea because of collapse of the vocal cords. This poster enlightens the various techniques of tracheostomy and different types of tracheostomy tubes, post-operative tracheostomy care as well as extubation in some surgical cases performed in our institution to maintain the patency of airway and save the life of the patient.

EP-O30
Trigeminal Neuralgia and its Management

Indrajeet Singh

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Abstract
Trigeminal neuralgia is a very peculiar disease. The pain, also known as tic douloureux, is paroxystic and very severe. It can be triggered by a light cutaneous stimulus on a much localized spot on the face (the so called trigger zone). The patient can sometimes benefit from long remissions without any treatment. With the exception of multiple sclerosis and of uncommon cases of posterior fossa tumours or other lesions impinging on the trigeminal nerve, ganglion or root, trigeminal neuralgia is considered as idiopathic. Some benign abnormality had for long been suspected. The current opinion is now in favour of a neurovascular conflict: an artery, most often a loop of the superior or antero inferior cerebellar artery, has an offending contact with the trigeminal nerve root, which results in localized demyelination and ectopic triggering of neuronal discharges. The aim of the poster is to review the etiology, clinical features, neuroimaging and its medicinal and surgical management of trigeminal neuralgia.

EP-O31
Use of Buccal Fat Pad In Oral Maxillofacial Surgery

Rohit Sharma

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Abstract
The buccal fat pad (BFP) originally described as an anatomic structure without any obvious function. For a long period it was considered to be a surgical nuisance. The buccal fat pad is commonly used in oral surgical procedures as it can be harvested easily, is reliable and has minimal complication. The fat pad undergoes atrophy as age advances and in severe cases of oral submucous fibrosis, and the availability of normal to good volume of buccal fat

is rare in these group of patients. Adequate volume of buccal fat pad is necessary to cover the surgical defect in oral submucous fibrosis, oroantral communication and other surgical defects. After grafting, the buccal fat is replaced by stratified squamous epithelium over a period of time. Many medical and surgical modalities have been tried. Various flaps have been used to reconstruct surgical defects following excision of fibrous bands. Buccal fat pad for intra oral reconstruction was used by us with excellent results. The aim of poster is to review the database available regarding BFP, including its anatomy, clinical usage, success and complications and to ascertain the reason for its preference over other modalities in various applications in oral surgery.

EP-O32
Cryotherepy-A Novel Treatment Modality In Oral Lesions

Nikita Suri

Himachal Institute of Dental Sciences

Abstract
Cryosurgery a therapeutical method that causes destruction of diseased tissue in situ by means of freezing is a well-established technique in surgery. It has been successfully used for many cutaneous conditions. The oral mucosa, because of charaterstics of humidity and smoothness, is the ideal site. It shows a very good esthetic result on skin and it may be either the first choice or may be used as an alternative to conventional surgery. It is well accepted by patients due to lack of discomfort, absence of bleeding and minimal or no scarring after healing. It is of great use in patients for whom major surgery is contraindicated due to either age or medical history. This poster strives to review the various indications, limitations, advantages and mechanism of action of cryosurgery in the treatment of oral lesions.

EP-O33
Role of TENS In Oral and Maxillofacial Surgery

Mamit Kumar

Himachal Institute of Dental Sciences

Abstract
Transcutaneous electric nerve stimulation (TENS) is a non-pharmacological method which is widely used by medical and paramedical professionals for the management of acute and chronic pain in a variety of conditions. Similarly, it can be utilized for the management of pain during various dental procedures as well as pain due to various conditions affecting maxillofacial region. TENS is used in paediatric as well as adult patients related to the field of dentistry. Also, an attempt is made here to briefly discuss history of therapeutic electricity, mechanism of action of TENS, components of TENS equipment, types, techniques of administration, advantages and contraindications of TENS. With this an attempt is made to raise its awareness among oral and maxillofacial surgeons regarding its applications. thereby increasing its use in the field of oral and maxillofacial surgery.

EP-O34
Stem Cells-Shifting The Paradigm From Conservation To Regeneration

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PDM Dental College and Research Institute, Bahadurgarh, Haryana

Abstract
The accelerated pace of research in the stem cell field in recent decades and the accumulated body of knowledge has spurred the interest in potential clinical applications of stem cells in all branches of medicine including regenerative dentistry. Among all stem cells, mesenchymal stem cells (MSCs) were reported to have anti-apoptotic, immunomodulatory, & angiogenic effects which are attributed to the restorative capacity of these cells. Tooth derived cells (Dental Stem Cells) are readily accessible and provide an easy and minimally invasive way to obtain & store stem cells for future use. Banking ones own tooth-derived stem cells is a reasonable and simple alternative to harvesting stem cells from other tissues. Stem cells hold enormous potential for the therapeutic treatment of neuronal degenerative disorders, chronic heart conditions, diabetes, spinal cord injuries, cancer, periodontal disease, bone regeneration and replacement of missing teeth. In 2009, autologous bone regeneration was done in humans with the use of Dental Pulp Stem Cells (DPSCs) in collagen sponge, demonstrating optimal repair of bone defects of the mandible and the restoration of the periodontal tissues distal to the 2nd molar, secondary to impaction. Ikeda E, Morita R, Saji Y et al. in 2009 demonstrated the successful functional tooth replacement in mouse by the transplantation of a bioengineered tooth on the alveolar bone. This poster will focus on the history, sites, origin, current isolation methods, technical details of banking and applications of Stem Cells in medicine & dentistry.

EP-O35
Uses of Botox In Maxillofacial Field

Joyce Sequeira, Jennie Clarence

Yenepoya Dental College

Abstract
Botox injections in the Oral and Maxillofacial region are used not only for therapeutic purposes like chronic migraine, idiopathic rational cervial dystonia, hemifacial spasm, oromandibular dystonia, strabismus, but also for cosmetic ones like to reduce the depth of facial wrinkles., Botulinum toxin, derived from clostridium botulinum is injected directly into the muscle. As it is a neurotoxin it blocks signals between the muscle and the brain, ultimately preventing muscle contraction in a localized area leading to smoothening and softening of the wrinkles.

EP-O36
Surgical Correction of Idiopathic Masseteric Hypertrophy—A Case Report

Yuvika Mittal, Vinod Kapoor, Sandeep Garg

Gian Sagar Dental College and Hospital

Abstract
Masseter muscle hypertrophy is a rare condition of unknown cause which is important in the differential diagnosis of head and neck masses, located in the cheek. It can occur unilaterally or bilaterally. Pain may not be a symptom, but most frequently a clinician is consulted for a cosmetic reason. In some cases prominent exostoses at the angle of the mandible may be found. Etiology of masseter muscle hypertrophy can be linked to malocclusion, bruxism, clenching or temporo-mandibular joint disorders, but in majority of the cases etiology is unclear. Several treatment options have been reported for masseter hypertrophy, which range from simple pharmacotherapy to more invasive surgical reduction of bony prominences as well as masseter muscle mass. A case of 21 year old male patient with unilateral masseteric hypertrophy is presented which was surgically treated by performing osteotomy at the angle of mandible region with debulking of masseter muscle.

EP-O37
Minimally Invasive Cosmetic Correction For Parry Romberg Syndrome-A Case Report

Simarpreet Singh, Vinod Kapoor, Govind Jindal

Gian Sagar Dental College and Hospital, Rajpura

Abstract
Parry-Romberg syndrome is a slowly progressing facial atrophy of subcutaneous fat and wasting of associated skin, cartilage, and bone. This disease was described first by Parry in 1825, then later by Romberg in 1846. The pathogenesis of the disease has been associated with cerebral disturbance of fat metabolism, vascular insult to the trigeminal ganglia, trauma, viral infections, endocrine disturbances, autoimmunity, and heredity. Its incidence and cause are unknown. It produces massive facial asymmetry, causing marked aesthetic damage and severe psychological discomfort, with repercussions to the psychophysical status of the patient. A case of 16 years old female patient with Parry Romberg Syndrome is described which was treated by minimally invasive technique using autogenous dermal fillers that yielded a good cosmetic result with good healing and without recurrences and complications.

EP-O38
Current and Future Applications of Nanotechnology In Oral and Maxillofacial Surgery

Shalini Singh, Ashish Gupta, Rahul Sharma

Sudha Rustagi College of Dental Sciences and Research

Abstract
Nanotechnology is the manipulation of matter on the molecular and atomic levels. Although nanotechnology is a relatively young field, there are countless biomedical applications in use or under investigation. Many specialties have benefitted from nanoscale refinements of diagnostic and therapeutic techniques. Oral and maxillofacial surgery is an incredibly diverse specialty, encompassing craniofacial trauma, oncologic and congenital reconstruction; burn care, and aesthetic surgery. Nanotechnology has the potential to bring enormous changes to the fields of maxillofacial surgery and dentistry through the aid of nanorobotics, nanomaterials, and biotechnology. Advances in nanotechnology have significantly impacted wound management, topical skin care, implant and prosthetic design, tissue engineering, and drug delivery systems. Currently, surgeons are researching the utility of nanoscale tools for bone regeneration, bone prosthetics, and drug delivery. Nanotechnology will continue to build upon preceding discoveries, and its biomedical applications in the field of oral and maxillofacial surgery will expand significantly.
Aim
This reviews the current status and the potential clinical applications of nanotechnology, nanaomedicine and nanodentistry. Why nanomaterials?
Conclusion
Nanotechnology based method is the best method for diagnosis, drug delivery and treatments of cancer and other diseases because of their novel properties and advantages.

EP-O39
Robotic Surgeries In Head and Neck

Poorva Mansabdar

V S Dental College

Abstract
Background
Robotic surgery is a method to perform surgery using very small tools attached to a robotic arm. The surgeon controls the robotic arm with a computer. It is usually associated with minimally invasive surgery and sometimes in certain traditional open surgical procedures. It is known to enhance precision, flexibility and control during surgery and allows them to better see the site compared with traditional techniques. Robotic assisted surgery (RAS) has gained popularity in several surgical specialities including head and neck surgery. RAS is being used to overcome the limitations of current endoscopic techniques and to expand the benefits of minimally invasive surgery (MIS) in head and neck. Also, the 3D visualisation and tenfold magnification of the operating field enhance the depth of field and clarity of the tissue planes during dissection in head and neck surgeries specially. The aim of this poster is to elaborate on the application of robotics in head and neck surgeries and its merits and demerits

EP-O40
Alopecia Areata & its Management

Nageshwar Iyer, Karan

MMCDSR

Abstract
Most of us associated hair loss with aging, through it can occur in any age & in associated with any medical condition. It can also occur in response to some treatment procedure e.g. chemotherapy. Nearly all

men eventually get that receding M-shaped hairline and thinning hair on the top of the head, also known as male pattern baldness. Many therapeutic modalities have been used to treat alopecia areata, with variable efficacy and safety profiles. The treatment plans are designed according to the patient's age and extent of disease. This poster discuses/emphasizes the various type of treatment plan starting from home remedies along with many of therapeutic agents that have been subjected & published studies with long-term outcomes. This poster also includes the non-surgical & surgical techniques of hair transplantation & latest advancements.

EP-O41
Neuralgia Inducing Cavitational Osteonecrosis: A case report

Bushra Rahman Malk

Government Dental College

Abstract
Chronic or recurring pain is more frequently seen in the head and face region than any other portion of the body. The diagnosis and treatment of chronic orofacial pain is challenging to the clinician as well as frustrating for the patient. This complexity can be due to the fact that anatomically, the orofacial region is one of the most highly innervated areas of the human body, especially the oral cavity. Referred pain patterns, collateral and multiple innervations of structures all create confusion about location of the pain generation. Neuralgia induced cavitational osteonecrosis is one of the differentials of chronic orofacial pain (NICO). The aim of the poster is to present a case of NICO reported the department of OMFS, GDC Srinagar.

EP-O42
Needle Stick Injuries Protocol

Anhad Mehra

SDM College of Dental Sciences, Dharwad

Abstract
Over 16 billion injections are administered each year by doctors, oral surgeons, nurses, midwives etc. around the world, and the incidence of injuries caused by these very same needles to their administrators have increased ten" fold among health care professionals over the last century. Studies have proven the vulnerability of medical and paramedical professionals to occupational exposure via needles and sharp injuries to blood-borne pathogens such as Hepatitis B (HBV), Hepatitis C (HCV) and the Human Immunodeficiency virus (HIV). Oral and maxillofacial surgeons are equally prone to the hazards of needle stick injuries, as studies have proven them being most vulnerable during recapping of syringes and disposal of the needles. Their benightedness makes oral surgeons unaware about the injury or the protocol for post -operative prophylaxis, knowledge of one, which can easily reduce the risk of infection. The protocol for needle stick and sharp injuries, proposed by Centres of Disease Control and Prevention (CDC), is a vital decorum as a standard precautionary measure. Hence, this poster explains the most widely accepted protocol for needle stick injuries by SDM Dental College for protection of their students and future surgeons. Author: ANHAD MEHRA

EP-O43
Botox-Uses In Maxillofacial Surgery

Geetinderpreet Kaur

Maharishi Markandeshwar College of Dental Sciences and Research

Abstract
Botulinum toxin is a neurotoxic protein produced by the bacterium Clostridium botulinum and related species. It is also produced commercially for medical, cosmetic and research use. There are two main commercial types: botulinum toxin type A and botulinum toxin type B. Botox is rapidly becoming an undispensable tool in the therapeutic armamentarium of oral and maxillofacial surgery. Clinical experience with BOTOX over the last 15 years has demonstrated this agents potency and safety, particularly in head and neck application. Its mechanism of inhibiting acetylcholine release at neuromuscular junctions following local injection is unique for treatment of facial wrinkles. Other dose dependant anti-neuroinflammatory effects and vascular modulating properties have extended its spectrum of application. Conditions such as TMJ disorders, sialorrhea, headache and neuropathic facial pain, muscle movement disorders and facial nerve palsy could also be treated with this drug. Further application are likely to be developed. The application of botulinum toxin has become a useful and significant tool for oral and maxillofacial lesions. The art of using Botox, a technical procedure, is influenced by aesthetic judgement and applications that extend beyond its use of reducing wrinkles to improve facial forms and shape. Novel uses for this unique substance will continue to permeate many medical and surgical specialities. Botox delivered using more precise techniques may permit improved results without desired consequences.

EP-O44
Obstructive Sleep Apnea

Sayli Agrawal

SDM College of Dental Sciences, Dharwad

Abstract
Obstructive sleep apnea (OSA) is frequently encountered in an undiagnosed, untreated state in perioperative patients. It increases the risk of respiratory, cardiac, and infectious complications following surgical procedures. The goal of OSA treatment is to alleviate airway obstruction during sleep. Obstructive sleep apnea (OSA) should be diagnosed and treated promptly. OSA is evaluated by polysomnography (PSG) results and treatment recommendations are planned for OSA patients. Treatment depends in part on the severity of the sleep-disordered breathing (SDB). Medical treatment options such as continuous positive airway pressure (CPAP) or Bilevel positive airway pressure (BiPAP), appropriate sleep hygiene, weight loss, avoidance of sedative medications, dental devices, body positions and medications. Surgical treatment options include Tracheostomy, Nasal reconstruction, Uvulopalatopharyngoplasty (UPPP), Mandibular osteotomy, Bimaxillary advancement, and Base of tongue resec-

tion. This poster will highlight the role of oral and maxillofacial surgeon in diagnosing and surgical management of the same. Author: DR SAYLI MANOJ AGRAWAL

EP-O45
Submental Intubation In Panfacial Fracture

Manish Agarwal

Karnavati School of Dentistry

Abstract
Submental intubation is an interesting alternative to tracheostomy, especially when short-term postoperative control of airway is desirable with the presence of undisturbed access to oral as well as nasal airways and a good dental occlusion. There were no perioperative complications related to the submental intubation procedure. Average duration of the procedure was less than 6 min. Submental intubation is a simple technique associated with low rates of morbidity. It is an alternative to tracheotomy in the surgical management of selected cases of panfacial trauma.

EP-O46
Evolution In Management Modalities For Osteomyelitis

Ahmed Elham Haque

M. S. Ramaiah University of Applied Sciences

Abstract
Osteomyelitis is defined as the inflammation of the bone and its marrow contents. Although bone is typically resistant to infection, osteomyelitis can nevertheless arise as a sequelae to trauma, odontogenic infections, open fractures, infected prosthesis and irradiated wounds. Eradication of osteomyelitis often involves a prolonged course of management, which is frustrating to the patient. The current management focuses on adequate antibiotic coverage and surgical debridement of nonviable tissue which often leaves substantial defects. Strategies to improve blood supply and tissue perfusion will serve to minimize recurrence in predisposed wounds and improve microbial clearance in affected areas. In this poster, we intend to outline the rationale, current status and evidence for several potential adjuncts to osteomyelitis management ranging from simple antibiotic management to biofilm microbiology to the use of ultrasonics. As such, we hope to throw light on some of these therapies which may well be the future of management for osteomyelitis.

EP-O47
Endoscopic Techniques In Oral and Maxillofacial Surgery

Rahul Sevkani

Karnavati School of Dentistry

Abstract
Endoscopy is an extension of the surgical field that allows direct access to areas of difficult visualization. The development of these minimially invasive techniques has enabled oral and maxillofacial surgeons to use endoscopic-assisted treatment for multiple conditions such as trauma, orthognathic surgery, jaw pathologies, aesthetic procedures and TMJ disorders. Decreased complication rates, comparable success rates,, diverse functionality and efficiency make endoscopy a helpful technique in the oral and maxillofacial surgeon^{TM}s armamentarium.

EP-O48
Bone Grafts In Oral and Maxillofacial Surgery

Jeet Bhagde

Jodhpur Dental College and General Hospital

Abstract
Bone Grafts Used in Oral and Maxillofacial Surgery Abstract Bone is essentially a highly vascular, living, constantly changing mineralized connective tissue and is responsible for providing hematopoietic cells which are essential for sustenance and regenerative capacity as well as its characteristic growth mechanisms and is concerned with the framework of body. Bone is one of the most commonly transplanted tissues of the human body. Bone as a graft may be applied in contour augmentation, strengthening and stabilization roles in congenital and acquired aesthetic as well as post traumatic deformities.. According to sources, bone grafts are classified as autografts, allografts and xenografts. It has been found experimentally and clinically that autogenous bone grafts possesses distinct advantages over the other two grafts. Bone grafting is a dynamic phenomenon. A successful bone graft is applied, heals, become incorporated, revascularizes and eventually assumes the form desired. Most investigators and clinicians agree that there are four basic criteria which should be applied to an acceptable bone graft material. My poster presentation is going to be on various bone grafts used in oral and maxillofacial surgery.

EP-O49
Various Treatment Modalities For Acne Scar

Joyce P Sequeira, Anand Gupta

Yenepoya Dental College

Abstract
Atrophic scarring on face is often a highly prevalent, significant, unfortunate and permanent complication of acne which has a significant impact on quality of life, and therapeutic challenge for the treating physician/surgeon. The treatment of atrophic acne scars varies depending on the types of acne scars and the limitations of the treatment modalities in their ability. Therefore many treatment options are available for treatment of acne scars, including topical treatment, cross technique, chemical peeling, dermabrasion/microdermabrasion, laser treatment, punch techniques, fat transplantation, other tissue augmenting agents, needling, subcision, and combined therapy: silicone gels, intralesional steroid therapy, cryotherapy. Various modalities have been used to treat scars, but limited efficacy and problematic side effects have restricted their application. In order to optimally treat a acne scar, we need to consider which treatment offers the most satisfactory result in a economical way. This presentation summarizes various treatment options for acne scars, which

may be useful in selecting the best therapeutic strategy in the treatment of acne scars while reducing or avoiding the side effects and complication.

EP-O50
Surgical Management of Masseter Muscle Hypertrophy: A Case Report

Himanshu Upadhyay

Institute of Dental Sciences Bareilley

Abstract
Masseter hypertrophy is a rare condition. Idiopathic masseter muscle hypertrophy (IMMH) was first described by Legg in 1880. The highest incidence for this condition is in the second and third decades of life with no gender predilection. It is mostly idiopathic with no known cause. Although numerous factors such as malocclusion, bruxism, clenching, or temporomandibular joint disorders, have been cited, but have not been proven conclusively. It is recognized as an enlargement of one or both masseter muscles. Most patients complain of facial asymmetry. Several treatment options reported for masseter hypertrophy, which range from simple pharmacotherapy to more invasive surgical reduction. The patient reported unilateral bulging in the region of the mandible angle, of slow and progressive evolution. He did not complain of pain or discomfort. In his physical examination we noticed unilateral masseter hypertrophy without local inflammatory alterations. OPG & USG was done for confirmation. We indicated surgical treatment with an extraoral approach. Aim of the present investigation is to report a case of idiopathic unilateral masseter hypertrophy, describe its symptoms and treatment.

EP-O51
Classification of Vascular Lesions of Head and Neck and its Management

Aditi Garg

Bangalore Institute of Dental Sciences

Abstract
Background
Vascular anomalies are the most common congenital abnormalities in infants and children. They are a group of lesions derived from blood vessels and lymphatics.
Objective
Vascular lesions have a varied clinical presentation and hence the treatment for each of them differs. Thus there is a need for an easy classification, based on which their treatment can be done.
Methodology
Retrospectively, we examined the different cases of vascular lesions operated in our unit in the last 10 years.
Results
Considering the cases treated in our unit a new classification has been proposed for it. Type I as mucosal and cutaneous lesions, Type II as Submucosal/Subcutaneous lesions, Type III as Glandular lesions, Type IV as Intraosseous lesions and Type V as the lesions in Deep Viscera. (Reference: Surgical Management of vascular lesions of the head and neck: a review of 115 cases. International Journal of Oral & Maxillofacial surgery: June 2011, Vol 40, Issue 6, Pages 577–583).
Conclusion
In this E-Poster I will be presenting the clinical features to help identify the specific category, the particular imaging modalities and the treatment options for each.

EP-O52
Platelet Rich Fibrin In Oral and Maxillofacial Surgery

Preet Kanwal Ahluwalia, Rohit Vashisht

National Dental College and Hospital, Derabassi, Punjab

Abstract
Regenerative procedures, maxillofacial reconstructions and oral implants etc. are highly dependent on successful regeneration and healing. The study of materials to promote bone regeneration is a key issue in oral surgery. Platelet Rich Fibrin (PRF) has come up as a second generation platelet concentrate with cicatritial properties and is biocompatible. It is a fibrin matrix in which platelets cytokineas, growth factors and trapped cells are released, enhancing healing and has got excellent regeneration potential. It has several uses in oral and maxillofacial surgery as a grafting material alone or in combination with other grafting materials, implant surgery, sinus lift surgeries, root end filling material, ridge preservation, fat grafting, derma fillers. This poster will highlight the uses of PRF as a grafting material.

EP-O53
Evaluation of The Efficacy of Platelet Rich Plasma In The Treatment of Androgenetic Alopecia-A Case Series

Patel Pravin Kumar Natvarlal, Anil Managutti

Narsinhbhai Patel Dental College and Hospital, Visnagar, Gujarat

Abstract
Androgenetic alopecia (AGA), is the most common type of alopecia in men, which is an androgen mediated event. Circulating androgens, including, dihydrotestosterone (DHT), enter the follicle via the dermal papilla (DP)^{TM}s capillaries, bind to the androgen receptor within the DP cells and then activate or repress molecular signaling pathways responsible for premature transition from anagen to catagen and follicular miniaturization. This include suppression of stimulatory pathways. Conventional therapies like minoxidil and finasteride for AGA may not be always effective, require life-long compliance and are associated with unacceptable side effect of sexual dysfunction. Hair restoration surgery is also a very tedious procedure. Platelet Rich Plasma is being widely used in a number of medical and surgical specialities to enhance tissue repair and healing. Its potentiality to promote hair growth in areas containing hair follicles is known since 1900. Hence, method of promoting hair growth by application of a blood extract is an interesting and upcoming safe, easy and inexpensive modality to treat AGA, with no danger of allergic reactions. Here by we report a case series of platelet rich plasma in the treatment of androgenetic alopecia. Key Words: platelet rich plasma, androgenetic alopecia, dermaroler. Result will be displayed in conference

EP-O54
Cyberknife

Rubi Gupta

RCDSR

Abstract
Cyberknife is a high precision, painless non-invasive robot guided frameless stereotactic radiosurgery system. It is the first and only radiosurgery system designed for treatment anywhere in the body. Cyberknife uses continual x-ray image guidance technology and computer-controlled robotic mobility to automatically track, detect, and correct for patient movements and target without interrupting the treatment. Cyberknife has proven to be effective alternative to surgery or conventional radiation for treating many conditions like vascular abnormalities—AVM, head and neck tumors, nasal and orbital tumors, cervical tumors, trigeminal neuralgia, pituitary adenomas in submillimeter accuracy and provides enhanced ability to avoid critical structures. Cyberknife gives a renewed ray of hope for a better quality of life especially for patients with previously diagnosed inoperable or inaccessible tumors and for those who have already received the maximum amount of radiation through other treatment methods and offers quick recovery and return to normal life.

EP-O55
Death Certificate: Dentists can now declare death!

M I Parker, Jinesh Patel

Krishna Institute of Medical Sciences karad

Abstract
Death is a fact which every individual has to acknowledge some or the other day, and one of its most important aspects is its certification. Understanding population growth and providing a demographic perspective for health planning and policy formulation, the death certification data is useful to public health planners, administrators, medical professionals and research workers. The size and geographical distribution of deaths in relation to prevalence of diseases, evaluation of risks of deaths from various causes at different ages, the medical implications of combination of the conditions resulting in death, proportion of deaths occurring in hospitals are a crucial aspect of interest to many professionals. Public health executives, therefore depend heavily on analysis of causes of death for vital statistical data, for formulating National and State health care Policies and Programs. Previously death certificate was issued by medical doctors only. But very recently as per Section 3.10 of the Regulations, Dentists can now declare death if a patient dies in their care. The Gazette notification in this regard has been issued by the Ministry recently. As many of us are new or unaware of the guidelines and procedure of death certification, this poster describes the content of death certificate and discusses how to write a death certificate. Realizing the importance of issuing a death certificate, let^{TM}s shoulder the responsibility along with medical doctors to issue a death certificate.

EP-O56
Case Report: Multidisciplinary Approach In Conservative Management of Combination Injuries of Dental Trauma

Md. Tipu Sultan

Haldia Institute of Dental Sciences and Research

Abstract
Multidisciplinary approach in conservative management of combination injuries of dental trauma.
Background
Combination injury is a complex oral disease, may have serious medical, aesthetic and psychological consequences on patients. This is a case about treating an adolescent patient with serious combination injuries in upper incisors. The upper left central incisor has crown fracture with avulsion. The upper right central incisor has extrusive luxation, the upper right lateral incisor has subluxation and crown root fracture.
Objective
Our objective is to find the efficacy of multi-disciplinary approach in this kind of injuries i.e. involving periodontal structure, tooth structure and associated soft tissue injuries.
Methodology
All the injured teeth were fixed with titanium trauma splint (TTS). This case involved operative evaluation with dental radiography and a multi-disciplinary approach including surgical, endodontics and periodontal therapy as well as post-operative observation and regular follow-up.
Results
All the injured teeth had pulp necrosis during treatment in two weeks, and root canal therapies were carried out immediately. 6 weeks later, no root resorption was observed on the injured tooth. Then the upper right lateral incisor was restored with fiber post and composite resin restoration and the upper left central incisor was restored with composite resin restoration. In the subsequent follow-up till now, all the injured teeth were in correct position and root was in its original position.
Conclusion
We performed a satisfactory treatment of combination injuries. This case illuminates that the timely multi-disciplinary approach is necessary and the TTS is beneficial.

EP-O57
Cancer Stem Cell: The Future to eradication!!

Deepak Thakur, Fiza Qureshi

Rungta College of Dental Sciences and Research

Abstract
Identification and understanding of Cancer stem cells (CSCs) have changed the approach to cancer treatment and probably be helpful in eradicating the disease completely. The capacity to generate the heterogeneous lineages of all cancer cells comprising a tumor and

these populations of cells are likely to be more relevant in determining prognosis. However, these cells do not operate in isolation, but instead rely upon signals co-opted from their microenvironment, making the targeting and imaging of CSCs within a cancer mass a daunting task. A better understanding of the molecular cell biology underlying CSC pathology will facilitate the development of new therapeutic targets and novel strategies for the successful eradication of cancer. In addition, the continued investigation of sensitive molecular-imaging modalities will enable more accurate staging, treatment planning and the ability to monitor the effectiveness of CSC-targeted therapies in vivo. This presentation examines what is known to date regarding the similarities and differences between cancer and somatic stem cells: CSC surface marker development and cell isolation, the frequency, potential origin and signal transduction of CSCs. In this presentation, we explore the possibilities and limitations of CSC-directed therapies and molecular imaging modalityand the therapeutic strategy of targeting cancer stem cells, a promising future direction for cancer stem cell research.

EP-O58
Recent Advances In Basic Life Support In Oral and Maxillofacial Surgery

Roop Kumar Nirmal

Govt. College of Dentisrty

Abstract
Basic life support is the main life-saving procedure which can be carried out by everybody. Resuscitation methods have changed little over the last 25 years, although much more is now known about resuscitation physiology, allowing modifications to be made for promoting perfusion and oxygenation of the vital organs. New guidelines have been published by the Resuscitation Council of the United Kingdom and the American Medical Association for teaching basic life support to all, and advanced cardiac life support to medical and para-medical staff. Nevertheless, the teaching and retention of these skills at even the basic level leaves a lot to be desired. Although most medical personnel feel they know what to do to administer prompt and effective resuscitation when required, nearly all are familiar with the hesitancy and indecision at the scene of a cardiac arrest. The theory and practice of basic life support skills are presented

EP-O59
Socket Preservation

Sagar Goyal

Swami Devi Dayal Dental College and Hospital

Abstract
Objective
The post extraction bone loss is estimated to be 40–60 % in the first Six months. Bone presence is important for further prosthetic recovery especially in implants.
Purpose
To present a review about biomaterials applicable in alveolar ridge sockets preservation for future implant insertion.
Advantages
1. To enable installation and stability of dental implant 2. To reduce alveolar bone loss volume 3. To regenerate bone faster allowing earlier implantation and restoration.
Conclusion
The post extraction augmentation is easily accessible method for bone loss prophylactic treatment. This technique could save some possible consecutive manipulations like Sinus lift, Lateral alveolar ridge augmentation, Splitting, Spreading and Bone Destruction.

EP-O60
Healing of Intraoral Wounds Closed Using Silk Sutures and N-Butylcyanoacrylate Glue: A Comparative Clinical Study

Dishant Shah

Karnavati School of dentistry

Abstract
There has always been a concern among clinicians regarding the process of wound healing in the oral mucosa after scalpel incisions or surgical injury. Healing by primary intention is preferable because there is less scarring, more rapid healing, and reduced discomfort. Suturing is the most common method to achieve this goal. Other biomaterials such as staples, adhesive tapes, adhesive glues, and fibrin sealants have also been used to hasten the pace of healing. Tissue adhesives have recently been approved by the US Food and Drug Administration. The use of tissue adhesive has been studied extensively for skin incisions. Thus there was a need to judge their performance in the oral cavity setting. The purpose of this study was to compare the clinical healing of intraoral wounds that were closed by suture with that obtained using N-Butylcyanoacrylate Glue.

EP-O61
Tooth Autograft:Use of human tooth as novel biomaterial for bone regeneration

K. C. Gupta, Gagandeep Singh Randhawa

Modern Dental College and Research Centre

Abstract
The regeneration of lost bony structures has been generally carried out using fresh, autogenous bone as a gold standard. As its biggest shortcomings, however, the harvest amount is limited, bone resorption after graft is unavoidable, & second defect is generated in donor area. Therefore, to overcome such shortcomings, allogenic bone & synthetic bone were developed & used in clinics, & efforts have been made to develop more ideal bone substitution materials. Lately researchers & clinicians have become interested in the use of human dentin from extracted teeth in the context of autogenous bone grafts. Generally, extracted teeth have been discarded as infective medical dusts in the world. In 2003, Murata et al., first presented the idea of using human dentin as bone graft material in the same patient to regenerate new bone. Since then several studies & clinical trials have been performed to fully establish this approach to provide a novel

dentin graft material to regenerate new bone in the same person. This presentation will feature the usage of tooth auto graft in Oral and Maxillofacial Surgery.

EP-O62
Physics Forceps

Pattanshetti and Santajirao Shinde

Bharati Vidyapeeth Deemed University Dental College and Hospital Sangli

Abstract
Background
Tooth extraction is a traumatic procedure often resulting in immediate destruction and loss of alveolar bone and surrounding soft tissue which leads to complex cascade of biochemical & histological events that ensues during wound healing process which leads to physiologic alteration of bone and soft tissue. One such atraumatic extraction technique using Physics forceps can reduce degree of damage & extent of resorption.
Objective
To evaluate the effectiveness of Physics forceps in atraumatic dental extraction.
Methodology
These are innovative designs that provide advantage by applying simple first class lever mechanics for atraumatic extraction of teeth.
Result
Achieved reasonably good and satisfactory results with the use of physics forceps with no significant complications.
Conclusion
This treatment modality used to achieve atraumatic extraction quickly and easily reduces operators and patients stress, can be used to extract almost all teeth, facilitates immediate implant placement with no significant complications.

EP-O63
Role of Botox In Facial Esthetics

K Vishnu

CKS Theja Institute of Dental Sciences and Research, Tirupathi

Abstract
Botulinum is a bacterial toxin produced by a gram-positive anaerobic bacterium, Clostridium Botulinum It was 1st used for treating facial wrinkles and aging of skin in 1988. Botox (a purified form of botulinum toxin type A) is used aesthetically to reduce the hyperkinetic lines of facial expression by blocking efferent action potentials to facial muscles, thereby reducing rhytides in the overlying skin. Botox injection is the fastest growing cosmetic procedure. Botulinum toxin type A (BTX-A) has been used successfully for many years for various cosmetic indications. Its use for upper facial rhytides and dynamic line applications (most commonly for the treatment of glabellar lines, horizontal forehead lines, and crow's feet) is particularly widespread. Careful clinical evaluation together with proper use of the techniques, and main indications of botulinum neurotoxin type A for aging face and other aesthetic uses, as well as some possible adverse reactions and their management are described in this poster presentation.

EP-O64
Auriculotemporal Nerve Block-In Orofacial Pain

Aakanksha

MMCDSR Mullana

Abstract
The auriculotemporal nerve is a branch of mandibular nerve. The auricultemporal nerve passes between the neck of mandible and the sphenomandibular ligament.auriculotemporal nerve block is a very important nerve block used in orofacial pain.this nerve block significant diagnostic value.as primary innervation of TMJ is from auriculotemporal nerve, with secondary innervation coming from the masseter and posterior deep temporal nerve. Therfore if TMJ is a source of pain, the nerve block will quickly eliminate the pain.since the TMJ area is frequent site of pain referral, the block is very valuable and indicated to help determine when the joint is actually a source of pain. Local anaesthetic blocking of realted tissue is key for making proper diagnosis.its a less traumatic method to anaesthetize the joint structure.

EP-O65
Endoscopy—A New Wave In Omfs

Kavya Priya, T.

College of Dental Sciences

Abstract
The necessity to preserve an aesthetic and undisturbed facial appearance following any maxillofacial surgery has led to a continued effort in the invention of less invasive procedures and decreased exposure in the surgical intervention of the facial structures. Reinstating the lost function is equally paramount. This is where the looming field of endoscopy comes out on top in bringing around a harmonious union of these two seemingly competing objectives. Endoscopy is defined as the examination of the interior of a canal or hollow viscous by means of an endoscope. Endoscope is used in maxillofacial surgery to correct Temporo-Mandibular Joint disorders, Implantology, Brow lift, Midface lift procedures, Frontal, Orbital, Condylar fractures, Bilateral Sagittal Split Osteotomy, Sialoendoscopy, Lithotripsy, Maxillary sinus procedures, Guided Biopsy of Jaw Cysts. The surmise of any maxillofacial surgical procedure has an upshot with the use of endoscopy in terms of duration of surgery and post-op care, post-op infection, improved aesthetics with respect to postoperative scarring, decreased healing time, patient compliance and satisfaction. Endoscopy could be the pioneer in maxillofacial surgery due to its virtue of minimum invasion and feasibility leading to admissible payoff.

EP-O66
Dimple Creation Surgery

Vidhi Verma

Mahatma Gandhi Dental College & Hospital, Jaipur

Abstract
Background
A dimple (also known as a gelasin) is a small natural indentation in the flesh on a part of the human body, most notably in the cheek or on the chin. Dimple creation is also known as Buccal Lipectomy or Dimpleplasty.

Objective
The aim of this poster is to discuss the various surgical techniques of dimple creation.
Methodology
A small incision is made inside the mouth after dimple placement is determined. A tiny piece of the cheek muscle is then removed to create a natural-looking dimple. The skin is positioned to create a dimple and the gap is closed with absorbable sutures. The sutures are placed through the cheek muscle connecting the dermis layer of the skin. A surgical knot is then tied which dimples the skin.
Conclusion
A natural dimple is the result of a small opening in a muscle in the cheek called the Buccinator muscle. Although its a hereditary trait, it can be created with a minimally invasive surgical procedure. Even though the cause of dimple is a defect in the muscle, in many cultures it is seen as a highly attractive trait.

EP-O67
Use of Nasolabial Flap In Oral Submucous Fibrosis

Pratima Pahilwan

Pravara Institute of Medical Sciences, Rural Dental College, Loni

Abstract
Oral Submucous Fibrosis Is A Chronic Debilitating Disease Associated With Restricted Mouth Opening and Poor Oral Hygiene. The Treatment Aims At Good Release of Fibrosis and To Provide Long Term Results In Terms of Mouth Opening. Various Local Grafts Have Been Used To Cover The Buccal Mucosal Defects After The Fibrotic Bands Are Released In Oral Submucous Fibrosis. Successful Use of Inferiorly Based Nasolabial Flaps In The Management of Oral Submucous Fibrosis Is Projected. A Total of 10 Histologically Proven Cases of Oral Submucous Fibrosis Having A Mouth Opening of Less Than 20 Mm Were Surgically Treated. The Procedure Involved (1) Bilateral Release of Fibrotic Bands (2) Measurement of Intra-Operative Interincisal Distance (Greater Than 35 Mm Achieved In All Patients After Release of Bands) (3) Covering The Defects With Inferiorly Based Nasolabial Flap. All Patients Had Post-Operative Physiotherapy, and Were Followed Up Regularly For One Year. All Flaps Healed Without Evidence of Infection, Dehiscence, Or Necrosis. Results Were Assessed By Comparing The Pre-Operative & Postoperative Maximum Mouth Opening. The Inferiorly Based Nasolabial Islanded Flaps Provide Reliable Coverage of Defects of the Buccal Mucosa and Improves Mouth Opening.

EP-O68
Skin Diseases and Their Medicinal Management

Snehashri Shailendra Jadhav

ACPM Dental College, Dhule

Abstract
Skin diseases accounts for 10–20 % of all health problems. Most common skin infections are dermatitis, eczema, acne, urticaria, psoriasis, skin allergy etc. due to various etiological factor which are viral, bacterial, fungal, autoimmune and many other common skin infections. A lot of pharmacological preparations are available that are used specially to treat skin disorders. These preparations are available in form of tablets, topical ointments, lotions, natural remedies like plant extracts and many other combination of newer drugs. All these treatment modalities will be highlighted in this poster.

EP-O69
Fever

Tasneem Beawerwala

ACPM Dental College, Dhule

Abstract
Fever is both a symptom and sign that alerts the physician to the underlying abnormality. Normal body temperature is 98Â°F–99Â°F with a diurnal variation, lowest in the morning and highest in the evening. Different types of fever are intermittent, continuous, remittent and other special types. A low grade fever is a common sequel to most surgical procedures as a result of inflammatory stimulus. Fevers greater than 101.5Â°F (38.6Â°C) post-operatively, usually demand evaluation. Various causes of post-operative fever and its management will be highlighted in this poster.

EP-O70
Endoscopy:A Marvel In Oral and Maxillofacial Surgery

Neila Mendonca

AECS Maaruti College of Dental Sciences and Research Centre, Bangalore

Abstract
Oral and Maxillofacial surgery is entering a new era. Minimally invasive surgery with the use of an endoscope has improved in the recent years. Surgeons can use the latest technological advances in equipment in an attempt to improve patient outcome. The endoscope has been described as an extra set of eyes and is the basis for innovation across multiple surgical disciplines and the fabrication of a new class of instruments and surgical technique. Trauma, Orthognathic, Sialoendoscopy and TMJsurgery are commonly performed with the assistance of the endoscope. The operating surgeon can visualize an area via the endoscope and instruct regarding the surgical maneuvers on the monitor, without obstructions to view. Endoscopically assisted surgery is gaining popularity and is becoming a tool frequently used by surgeons to assist in and simplify some of the more difficult techniques that often require more extensive surgical exposure for visualization.

EP-O71
Recent Advances in local anesthetic technique

Rajesh Tak

Mahatma Gandhi Dental College & Hospital, Jaipur

Abstract
Background
Local pain management is, without doubt, the most critical aspect of patient care. The improvements in agents and techniques for local

anesthesia are probably the most significant advances that have occurred in dental science, enabling the profession to make tremendous therapeutic advances that would otherwise not have been possible.

Objective

This poster presents the most recently introduced local anesthetic techniques used to deliver local anesthetics.

Methodology

The newer local anesthetic delivery systems aimed at easing the fear of the needle takes advantage of the gate control theory of pain management which suggests that pain can be reduced by simultaneous activation of nerve fibres. The recent local anesthesia delivery devices used in recent times are vibraject, dentalvibe, accupal, wandsystem, comfort control syringe, jet injectors, syrijet, med-jet hIII, safety dental syringe, ultrasafety plus XL syringe etc.

Conclusion

Today's anesthetics are safe, effective, and can be administered with negligible soft tissue irritation and minimal concerns for allergic reactions.

EP-O72
Hypoglycemia Vs Syncope

Nageshwar Iyer, Kanwar Inderjot Singh

MMCDSR

Abstract

Hypoglycemia is the most common endocrine medical emergency. Any interruption to continuous inflow of glucose to the brain puts the individual at risk for neuroglycopenia that impairs its function and results in symptoms like weakness, tiredness, shaking, headache. Treatment of hypoglycaemia especially in those patients with diabetes mellitus, involves punctilious attention to preventive measures. This acute event if recognized in time requires treatment with oral ingestion of free carbohydrate. Neuroglycopenia can be treated equally effectively with intravenous glucose or parenteral glucagon administration. Whereas, syncope defined as sudden loss of consciousness associated with the inability to maintain postural tone, followed by spontaneous recovery, is relatively common. Four etiologic categories of syncope are cardiac cause, unknown cause, neurologic cause or other causes. Symptoms may include light headedness, sweating, pale skin, blurred vision, nausea, vomiting etc. Recommended acute treatment of syncope involves returning blood to the brain by positioning the patient in Trendelenburg's position or leaning forward and the head between the knees for at least 10–15 min. The purpose of this presentation is to differentiate the clinical signs and symptoms of such patients so that they can be dealt with effectively.

EP-O73
The wonders of plasma rich protein in wound healing

Yenepoya Dental College

Vijoo Rajkumar

Abstract

Plasma rich protein was first introduced in the year 1980 for the treatment of cutaneous ulcers. Platelet-rich plasma (PRP) is defined as a portion of the plasma fraction of autologous blood having a platelet concentration above baseline. It contains a high level of platelets and a full complement of clotting and growth factors which helps in wound for faster healing. The use of PRP was expanded in maxillofacial and plastic surgery later on. The method is cost effective and easy to make. This presentation highlights the benefits of application of plasma rich protein in wound healing.

EP-O74
Implications of Finite Element Analysis In Oral and Maxillofacial Surgery

M. k. Gupta, Monica Mahajan

Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital

Abstract

Background

Digital imaging in dentistry & medicine has opened new possibilities to predict the behavior of components of facial skeleton when subjected to loading or trauma. Finite element analysis (FEA) is a computational technique originally developed by the engineers, but its current use in biomedical research and development is a boon to us. It helps us to analyze and comprehend various situations & virtually simulate every model (eg: bones, cartilage, muscles, etc.) for its exact pre, intra & postoperative behavior, as if it is in reality.

Objective

To define the use of FEA in assessment, planning & treatment of various oral and maxillofacial surgical procedures.

Method

Formulating a 3-D finite element computer model is a technique sensitive process. It includes following steps: a) Acquiring material properties like Youngs Modulus Modulus of elasticity Yield strength Bulk strength b) Designing a 3-D model mimicking the original model c) Creation of a Finite Element Model d) Finite Element Analysis of the model.

Results

FEA helps us to analyze any structure in one, two & three dimensional elements. It helps us in simulating impacts / surgeries / osteosynthesis and biomechanical analysis & interpretation of results of simulation.

Conclusion

The future of maxillofacial surgery will be subjected to evidence based practice. So the correct use of FEA will open doors for clinically relevant predictions & evidence based practice in Maxillofacial surgery. KEY WORDS: Maxillofacial surgery, FEA, Biomechanics

EP-O75
Voxels To Live Visuals

Ramdas Balakrishna, Rahul Maheshwari

K. L. E Society's Institute of Dental Sciences

Abstract

Stereolithography has become well known in the prototyping sectors. Recently stereolithographic (SLA) models have been used in complex craniofacial surgeries for visualization, presurgical planning and implant design. Stereolithographic model are constructed from digital image data which enables the representation of complex 3 dimensional anatomical structures, surface and internal structure of organ

and can be produced by polymerization of UV sensitive liquid resin using a laser beam which will be advantageous for reconstruction of complex defects because a more accurate preoperative planning is possible. This technology has also been utilized effectively in surgical procedures like trauma, TMJ surgery, orthognathic surgery, correction of facial and skull deformities, and jaw pathology. Use of SLA models has significantly contributed to improved reconstruction of form and function, decreased operating room time and ability to perform more precise and accurate surgical procedures.

EP-O76
Breathe While Asleep: Surgery A Remedy

Ramdas Balakrishna, Veena GC, Bhuvaneshwari Srinivasan

K. L. E Society's Institute of Dental Sciences

Abstract
Obstructive sleep apnoea is a common disorder characterized by abnormalities in the oro-pharyngeal airway and physiology. There are many predisposing factors that leads to this condition a few being, obesity, short neck, large tongue, retruded jaws etc. Symptoms of obstructive sleep apnoea includes increased waking episodes during sleep and increased scores on apnoeic-hypopneic index and daytime sleepiness index. Though conservative management like continuous positive pressure airway and occlusal splints have been employed for treatment, the results are not very significant. Surgery is the only option that provides a definitive treatment for this condition. They are either classified based on tissues which are operated on i.e., soft tissue or hard tissue surgeries. and based on the anatomical levels of surgeries they are classified into nasal level surgeries, soft palate level surgeries or the hypo-pharyngeal level surgeries. Surgical procedures that are done includes the uvelopalatopharyngoplasty, maxillo-mandibular advancement, tongue base surgery, hyoid suspension surgery, supra-hyoid myotomy etc. Stanford protocol and the international multilevel approach protocols are presently being practiced worldwide to treat obstructive sleep apnoea. Various studies done on the effectiveness of these surgeries in management of this condition reveals a greater level of success compared to conservative management.

EP-O77
Through The Looking Glass

Jayakumar N, Jayalakshmi Jayakumar

Government Dental College Kottayam

Abstract
Radiographic evaluation is an important diagnostic tool in assessment of Maxillofacial pathologies and Maxillofacial trauma. Current imaging techniques such as panoramic radiograph, conventional CT are two dimension representation of three dimensional objects and suffer from several limitations. With the advent of Cone Beam Computed Tomography (CBCT) in diagnostic imaging modality, high quality, accurate three-dimensional representation of the osseous elements of the maxillofacial skeleton are now possible. CBCT helps to view images at low dose (30–78 microSv) with sufficient spatial resolution for the applications in diagnosing maxillofacial trauma, its treatment planning and post-operative evaluations. This poster provides information on the vast application of CBCT in the maxillofacial region.

EP-O78
Autologous Fat Injection-A Versatile Technique In Treating Congenital Or Acquired Deformities of Face

Soumithran C S, Arul Dev DP

Govt Dental College Calicut

Abstract
Introduction
The injection of fresh or frozen autologous fat from fat rich areas of the body and injecting back to the defective areas of the face. The fat particles are able to form their own fibroblasts and the catabolized fat cells are augmented with fibroblasts and elastin fibers and Virtually no scars are formed and the face stabilizes as a result of the procedure.
Objective
It can be used in cases of congenital or acquired deformities of the osseous and connective tissue structures like sequelae of burning, blunt soft-tissue injuries, facial fractures, cleft lips, midfacial hypoplasia, hemifacial atrophies, micrognathia. etc and also to t o replace atrophied or wasted structures resulting from aging or the sequelae of inflammatory skin diseases.
Methodology
Following tumescent anesthesia, the fat is removed using low-vacuum liposuction from areas such as lower abdomen, medial side of the thigh, knee etc.and then the fat is injected to the planned area, which is defective.
Advantages
The fat globules can be easily. obtained and is autologous, No immunological reactions, and low cost etc.
Possible Complications
Edema, Hematomas, Overcorrection, undercorrection, Fat necrosis, may require multiple injections, migration of the fat and possibly calcification.
Conclusion
Autologous fat injection is a cheaper, easier and quick technique in treating facial deformities like in case of hemifacial deformities especially when the patient doesn't like a complicated surgical procedure.this procedure sometimes require multiple sittings and there is a chance for relapse.

EP-O79
Hyperbaric Oxygen Therapy In Head Neck Face Surgery

Aruna Tambuwala, K. Rahul Kumar

M. A. Rangoonwala College, Pune

Abstract
Hyperbaric Oxygen Therapy in head neck face surgeries.
Background
Hyperbaric Oxygen Therapy (HBOT) is increasingly being accepted as a beneficial adjunct to diverse clinical conditions. Non-healing ulcers, chronic wounds and refractory osteomyelitis are a few conditions for which HBOT has been extensively tried out.

Method
Hyperbaric Oxygen Therapy is relaxing and painless. The patient lies on a bed enclosed in a clear Plastic chamber. The patient and therapist can see one another and communicate through an intercom.
Result
Granstrom G et al produced the first reported evidence in 1993, about HBO induced angiogenesis in bone as well as soft tissue, by using laser Doppler flowmetry.Adequate tissue oxygen tension facilitates fibroblast proliferation, new capillary formation, osteogenesis and optimal polymorphonuclear leukocyte function.
Conclusion
Maxillofacial surgery has also found a good ally in HBOT in managing dental conditions. Doctors in all fields must familiarise themselves with recent evidence on this mode of therapy, so that their patients are not denied the gains of this modern treatment.

EP-O80
Surgical Approaches To Skull Base

Shruti Rao

Yenepoya Dental College

Abstract
Malignant tumours of the sinonasal tract comprise approximately 3 % of the malignancies that arise in the upper aerodigestive tract. Approximately 10 % of tumours that arise in the sinonasal tract originate in the ethmoid and/or frontal sinuses, and are likely to involve the anterior cranial base. The route of spread of tumours originating in the anterior skull base and paranasal sinuses is determined by the complex anatomy of the cranio maxillofacial compartments. These tumours may invade laterally into the orbit and middle fossa, inferiorly into the maxillary antrum and palate, posteriorly into the nasopharynx and pterygopalatine fossa, and superiorly into the cavernous sinus and brain. Recent improvements in endoscopic technology now allow the resection of the majority of benign neoplasms and some early malignant tumours with minor dural involvement. For advanced-stage malignant tumours and benign tumours with frontal bone involvement, the classical open approaches remain viable surgical techniques. In this poster we review the open surgical resection approaches used for resections in the cranio maxillofacial area.

EP-O81
Role of Platelet Concentrates In Oral and Maxillofacial Surgery

Ramdas Balakrishna, Ramya Narahari

KLES Institute of Dental Sciences, Bangalore

Abstract
Technological advances in the fields of medicine and allied sciences have given much needed momentum in to the field of microbiology and regenerative medicine. They indeed provided a boost to innovate new yields for both hard tissue and soft tissue regeneration in dentistry. One among them is the use of platelet concentrates (platelet rich plasma [PRP], platelet rich fibrin [PRF]. Autologous concentrate of blood platelets with a suspension of growth factors offers an enhanced healing of hard and soft tissues. It is an auxiliary benefit for an operator to be aware of platelet concentrates and healing properties for delivering unsurpassed oral health care to patients. The poster contains insight to the regenerative potential of platelet concentrates in oral and maxillo facial surgery.

EP-O82
Minimal Invasive Surgery—An Achievable Goal

Parveen Sharma, Disha Goyal

J. N Kapoor, D. A. V(C) Dental College

Abstract
Endoscopic techniques have revolutionized many areas of surgery and have been applied to both aesthetic and re constructive procedures in head, neck, and craniomaxillo facial surgery. Benefits of endoscopy include small and remotely placed incisions, acceptable scars and direct visualization of an illuminated and magnified operative field. Minimal dissection and tissue manipulation result in decreased pain and swelling, less overall morbidity and faster recovery. For these reasons, minimally invasive surgery has gained enthusiastic public acceptance with overall patient satisfaction. The classic window technique, sinuscope aided, controlled sinus floor augmentation has been suggested in cases of lesser atrophy in the lateral maxilla. Development and refinement of endoscopic techniques for exposure, creation of osteotomies and placement of miniature buried distraction devices allow orthognathic procedures to be routinely performed under local anesthesia with intravenous sedation in an outpatient setting, in future. This would have a significant impact on cost, patient morbidity and availability of treatment. Frontal sinus fractures, orbital floor fractures, zygomatic arch fractures, and subcondylar mandible fractures are the most notable examples where endoscopic techniques have found acceptance. Dacrocystorhinostomy accomplished through endonasal endoscopic approach. Its use in maxillofacial surgery has simplified many procedures for further research.

EP-O83
Buccal Fat Pad in Oro-Antral Fistula Closure—A Case Review

Rachit Mathur

K. D. Dental College, Mathura

Abstract
Oro Antral Fistula (OAF) is a pathological communication between the oral cavity and maxillary sinus which has its origin either from iatrogenic complications or from dental infections, osteomyelitis, radiation therapy or trauma. OAF closures can be achieved using different flaps which show both advantages and limitations. Therefore they all need careful consideration in order to select the best approach depending on the situation. The most widely employed flaps are of three types: Vestibular Flap, Palatal Flap and Buccal Fat Pad Flap (BFP). This clinical report describes a case achieving optimum result using buccal pad fat in a patient of Oro Antral Fistula in relation to tooth 17 region. The Buccal Fat Pad Flap is an axial flap and may be used to fill small-to-medium sized soft tissue and bony defects in the palate, superior and inferior alveoli and buccal mucosa. Being an autologous graft material, it is not rejected by the body and also causes minimal morbidity to the recipient site.

EP-O84
Endotracheal Intubation: A Challenge For Anestetist in Maxillofacial Trauma

Syed Furqhan Uddin

H. K. E. S. S. Nijalingappa Institute of Dental Sciences and Research

Abstract
There are various techniques available for airway management in patients with maxillofacial trauma. A choice often has to be made between orotracheal and nasotracheal intubation when surgical access to the nasal or oral cavity is necessary. Management of the airways in the presence of midface or panfacial injuries with mandibular involvement requires special consideration and may need surgical airway access. Various methods of intubation and surgical airways are described in the literature like submental intubation and tracheostomy. No consensus exists to date as to the best way of controlling the airway when orotracheal or nasotracheal intubations are contraindicated as in, panfacial fractures. This poster intends to present the intubation techniques which have been modified to suit the requirements of the maxillofacial surgeon in managing complex fractures of the facial skeleton.

EP-O85
DC at a Glance…

Priyadarshani J. Gir

A.C. P. M. Dental College, Dhule

Abstract
Birth and Death are the two most important events in the life of any individual as the person's existence starts at the moment of birth and ceases at the moment of death. Apart from this legal importance, recording of births and deaths creates vital basic data about a population group. In India, with the passing of the Act—Registration of Births and Deaths Act—in 1969, registration of these events is mandatory. Registration of not only the occurrence of death, but also its cause is equally important. Statistical analysis of causes of death forms important morbidity & mortality statistics, which is the backbone of National Health Policy and Planning. Recently Dental surgeons have been given permission by Ministry of Health and Family Welfare (MOHFW) to declare and sign death certificate. Hence, it is once responsibility to know about the format, formalities, pros and cons and medico legal aspect of death certificate.

EP-O86
Virtual Human Face: Superimposing 3D Image with CBCT

U. M. Joshi, Satish Patil, Neelam Singh

HKE'S S. N. Dental College, Gulbarga

Abstract
Oral and maxillofacial surgery has witnessed tremendous advances in the imaging technologies over the past three decades. With these advances the need for the more precise diagnostic tools, specially imaging methods have become mandatory. From simple IOPA, advance techniques like CT, CBCT, MRI, Ultrasound, PET (nuclear medicine) have also found place in modern technique. Changing from analogue to digital radiography has made the process simpler and faster with easy image storage, manipulation and retrieval. The 3D imaging has made the complex craniofacial structures more accurate for examination and early and accurate diagnosis of maxillofacial pathologies in-depth. Nowadays, a newer technique is evolving towards building a photo realistic virtual human face for cranio-maxillofacial diagnosis and treatment planning by superimposition of CBCT and 3D photograph which permit concurrent assessment of bone and soft tissue during diagnosis and treatment of oral and maxillofacial surgery, as virtual surgical planning. This poster highlights the recent advances in imaging modalities in oral and maxillofacial surgery.

EP-O87
Inferior Alveolar Nerve Injuries

Poonam Preet Bhandari, Sashi Devi Haranal, Aashish Malik

PDM Dental Collage and Research Institue

Abstract
The Inferior alveolar nerve can be damaged during many dental or surgical procedures i.e. including administration of LA, mandibular implant bed preparation, endodontic therapy, third molar surgery, ablative surgery, fracture of mandible, orthognathic surgical procedures. These injuries are closed injuries, unlike the open wounds seen on traumatised limbs, which are amenable to immediate exploration and repair by orthopaedic or plastic surgeons. Multitude of events such as neuroparaxia, axontomesis, neurotemesis following nerve injury may be due to, direct mechanical trauma (tear, section, crush, stretch), neural chemical trauma due to intracellular components released during trauma, and ischaemic injury due to entrapment within a bony canal (IAN), providing a complex therapeutic challenge. The incidence of IAN involvement 1–7 days, specifically related to 3rd molar surgery is around 1–5 %, thus the resultant injury may be a combination of peri-, epi-and intra-neural trauma leading to haemorrhage, inflammation and scarring, resulting in possible demyelination. Prevention of nerve injuries may be possible by identifying clinical and radiographic risk factors. The complexity of nerve injury was classified by Seddon and Sunderland in 1940 and focused on trying anatomically to differentiate nerve injuries. Many of these iatrogenic nerve injury can be avoided with careful patient assessment and planning. Due to the difficulty in defining the extent of injury and poor accessibility to the IAN (closed wound), immediate surgical repair of damaged IAN is uncommon. Therefore, the 1st line of treatment is medication and physiotherapy to enhance nerve regeneration.

EP-O88
O_3 in Oral Surgery

Rashmi Patwa, Uday Londhe

D Y Patil Dental College Pune

Abstract
Ozone therapy in dentistry is gaining a place in everyday dental practice. Ozone has antimicrobial, disinfectant and wound healing properties. Traumatic wounds, candidiasis, cysts, chelities can be

treated with either ozonized water or oils. Use of ozone is also seen for treatment of refractory osteomyelitis, bisphosphonate induced osteonecrosis of jaw and also selective efficacy of implants. Ozone therapy is also useful for the reduction of postoperative pain and increased quality of life after third molar surgery. This poster helps in the review of different uses of ozone in Oral Surgery.

EP-O89
Secondary Repair of the Maxillectomy Defect Using Local Flaps

Ashish Rajput

M.A. Rangoonwala Dental College and Hospital

Abstract
Objective
The aim of this study was to describe a method for secondary repair of maxillectomy defects.
Material and methods
The patients underwent secondary repair of palatal defect following maxillectomy from March, 2007 to September, 2011. They were 4 men and 1 woman, and their ages were ranged 19–70 years (mean 50 years). Partial maxillectomy or hemimaxillectomy was performed to remove malignant tumor involved alveolus and palate, and subsequent oronasal or oroantral fistula was treated with obturator. Secondary repair with palatal rotation flap and buccal advancement flap was done 4–24 months (mean 10.8 $\pm$ 7.9 months) after the maxillectomy.
Results
Patients with smaller defect showed closure of the defect and healing on donor site without complication and no oral-antral or oral-nasal communication. However, Patients with larger defect, who underwent hemimaxillectomy, showed postoperative fistula, and it was small enough to be closed by another rotational flap surgery. In functional aspect, hypernasality due to postoperative scar on soft palate was noted in one patient with larger defect but no patient showed swallowing problem like nasal regurgitation. and also constructed oral mucosa on the defect area was adequate for prosthesis. Conclusions It is considered that the secondary repair of maxillectomy defect is worthy to be tried in maxillectomy patients for enhancing the quality of life, since this procedure, simple and less burdensome to patient, showed functionally acceptable results.

EP-O90
Role of Stem Cell In Oral and Maxillofacial Surgery

Satya Prakash Gupta, Vaibhav Pratap Singh

Chandra Dental College and Hospital

Abstract
The recent advances in the field of stem cell research has prompted Oral and Maxillofacial surgeon's to try feasibility of using this unique blood component for regeneration and reconstruction of lost facial structure. Harvesting, storage, multiplication and finally contouring of the tissue growth thus obtain is very innovative and fascinating area of surgery. This poster highlights these aspects and role of stem cells in Oral and Maxillofacial surgery.

EP-O91
Giant Submandibular Gland Sialolith: A Case Report

Gurjaskamal Singh Mahal, Vinod Kapoor, Sandeep Garg

Gian Sagar Dental College and Hospital, Rajpura

Abstract
Sialolithiasis is an abnormal formation of stones composing mainly of calcium and phosphorus in the salivary glands of a person. The submandibular salivary gland sialolithiasis constitutes 80 % of the salivary gland calculi. Factors causing submandibular gland calculi are the tortuous path of the warton's duct, saliva stagnation, medications like anti-psychotics, anti-hypertensives and anti-histaminics, precipitation of calcium salts and mucous nature of the saliva of submandibular salivary gland. Commonly patient may experience pain and edema when the duct is obstructed. A case report of a person who reported to the department of oral and maxillofacial surgery with chief complaint of pain and swelling in the floor on the left side is presented here. Diagnosis of left submandibular gland sialolith od deep lobe was made along with dilatation of the duct. Transoral approach was taken for the removal of sialolith.

EP-O92
Arteriovenous Malformations of Orofacial Region and its Different Treatment Modalities

I B Kar, Niranjan Mishra, Brundabati Meher

SCB Dental College, Cuttack

Abstract
AVMs of the oro-facial region are the most aggressive form of all the vascular malformations and can lead to dramatic deformities, functional impairment and possible mortality. They are high-flow lesions characterized by direct connection between arteries and veins without an intervening capillary bed. Majority of these lesions are congenital while some are noted during childhood or in adult life. Among head and neck AVMs approximately 70 % are in mid face.
Objectives
The objective is to further improve the ability of AVM recognition and provide the clinician with a large spectrum of valid treatment modalities and concepts.
Methodologies
A review of literature, cases managed in our department as well as review articles of current diagnostic modalities and corroborated management of facial AVMs.
Result
Imaging provides crucial information about initial diagnosis and aids in follow-up. Specific imaging modalities like usg, mri, angiography contribute to the process by providing information about anatomic extent, size, locations, presence or absence of phlebolith and proximity to vital structures. There have been various treatment options for AVMs such as medical therapy, surgical excision or sclerotherapy.
Conclusion
Although there have been some suggestions about how to select different treatment modalities, there is no standard recommendation for treatment of AVMs. The management of AVMs is a multifactorial decision based upon the temporary or permanent therapeutic goals and is best determined by the patients' attitude and clinician's experience.

EP-O93
Infection Control Protocol in Oral and Maxillofacial Surgery

Hemant Batra, Satya Narain, Sunil Kumar Beniwal

Harvansh Singh Judge Institute of Dental Sciences and Hospital

Abstract
Every country follows standard acceptable protocol for infection control in the hospital and specially the dental units where the chances of infection are maximum. With increasing prevalence of hepatitis and HIV, It becames much and more necessary for the hospitals as whole and oral and maxillofacial units in particular to have a standardised protocol of infection control. We in our unit follow a standardised protocol for each and every patient and My poster contain these standardised infection control protocols.

EP-O94
Nanotechnology—"Glimpses Into Our Nano- Enabled Future"

Akanksha Gorad

YMT Dental College and Hospital

Abstract
"All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident."Regenerative nanotechnology is at the forefront of medical researchtherapeutics based on its principles may form the core of applied research for the future. Here we give an account of its current use in oral and maxillofacial surgery, and implications and challenges for the future.

EP-O95
Inverted Maxillary Third Molar, A Rare Occurence-A Case Report

Moin Iftikhar Shapoo, Udit Prakash

Maharana Pratap College of Dentistry and Research Centre Gwalior

Abstract
The most commonly seen impacted teeth in oral cavity are mandibular third molar, followed by the maxillary third molars, the maxillary canines and the mandibular premolars. Inverted maxillary third molar is a rare occurrence. Cases of inverted maxillary third molar reported in literature are very few. This is a report of an interesting case of inverted maxillary third molar in a 60 year old female patient. The patient was treated surgically. The inverted tooth along with maxillary second molar was extracted by transalveolar method using standard surgical protocols and also by explaining all due risks of morbidity to the patient. Maxillary second molar was removed because after exposing the tooth it was seen that the tooth was lying in the vicinity of roots of second molar. There was no significant postoperative complication noticed.

EP-O96
Use of Buccal Fat Pad in Oro Antral Communication Closure

Roohi Shakil Syed

Pravara Institute of Medical Sciences, Rural Dental College, Loni

Abstract
Oro antral fistula is a pathological communication between the oral cavity and maxillary sinus which has its origin either from iatrogenic complications or from dental infections, osteomyelitis, tooth extraction or trauma. Its closures can be achieved using different flaps which show both advantages and limitations. The use of buccal fat pad in the closure of oro-antral communication/fistula is new and promising. The anatomical structure of buccal fat pad was first described by BICHAT in 1802, and EGYEDI IN 1977 was the first to report the use of BFP for oral reconstruction. This technique is a simple and excellent technique for the closure of oro-antral communication. The management was successful with no postoperative complications.

EP-O97
Informed Concent In Maxillofacial Surgery

Gaurav Singh Madan Mishra, Akshay Kumar

Sardar Patel Post Graduate Institute of Dental and Medical Sciences

Abstract
Background
Informed consent is a process for getting permission before conduction a healthcare intervention on a person after being properly advised of the relevant medical facts and risk involved. In this process a patient learns about and understands the purpose, benefits, and potential risks of a medical or surgical intervention.
Objective
To understand the importance of informed consent.
Methodology
This study included patients planned for minor and major oral & maxillofacial procedures. All patients were informed verbally as well as a written consent form was also obtained from them.
Results
One of the major problems with the informed consent process in practice is the occurrence of misunderstandings between patients and clinicians. In practice, however, this does not always occur but consent process should be valid, comprehensive and patients need to realize and understand its importance.

Conclusion
Clinician should take all the steps necessary to ensure that patients fully understand what is being stated in the consent form. Even when there are no language barriers or religious impediments to thwart the communication relationship between clinicians and patients, misunderstanding can still occur due to a patients false expectations about the outcome.

EP-O98
Evolution of Genaeral Anesthesia, Airway Devices and Different Intubation Techniques

Bhushan R Wankhede

ACPM Dental College, Dhule

Abstract
For a surgical procedure to be called successful the pre-requisites are good surgical skills and adequate anesthesia to make the procedure smooth for the surgeon and to render a pain free experience to the patient. The concept of anesthesia gained importance with the discovery of ether and its anesthetic properties. Since then various anesthetic agents and anesthesia induction techniques have been introduced which ensure optimum maintenance of cardiovascular, respiratory and central nervous system, thus maintaining the homeostasis of entire human body. Recent introduction of anesthetic agents like propofol, isoflurane and anesthetic techniques decreased the rate of intra operative complications that occur due to the effect of general anesthesia. This poster aims to summarize the evolution of anesthesia, airway devices and different intubation techniques.

EP-O99
Role of Ultrasonography in the assessment and management of difficult airway in Oral and Maxillofacial surgery

Ritesh rajan, Dinesh Jhawar, Anvesh Kumar Reddy

SVS Institute of Dental Sciences

Abstract
Conventional endotracheal intubation may be difficult in several patients in the specialty of Oral and Maxillofacial Surgery such as TMJ Ankylosis, Orofacial Infection, Complex Maxillofacial Trauma, and clinical conditions leading to Trismus and due to other Anatomical factors. All the Maxillofacial units may not possess fiberoptic bronchoscope and it is quite challenging to assess and intubate in above mentioned conditions. Ultrasonography can be a valuable guide in assessment of difficult airway and also guide the clinician during elective intubation procedures. It offers several advantages such as it is pain free, economical and avoids radiation exposure. This poster presents case reports which were operated in our unit with the help of ultrasonography as a guide in preoperative assessment of difficult airway in TMJ Ankylosis.

EP-O100
Foreign Body in Maxillofacial Region: A Report of 2 Cases

Mukul Padhye, Pooja Mehta

D. Y. Patil School of Dentistry, Navi Mumbai

Abstract
Background
Foreign body lodged in the oral cavity and maxillofacial region is a very uncommon incidence. Presentation of foreign body ranged from asymptomatic discovery, pain, swelling and recurrent infection.
Objective
The objective of this study is to report a case of a foreign body in the oral cavity, which was subsequently found to be a metal mass in case 1 and a wooden stick in case 2.
Methodology
Area of injury was exposed using an extra oral incision. Blunt dissection was done to expose and explore the site.
Results
A metal body was encountered in case 1 and wooden stick was encountered during the procedure in case 2. Foreign body was retrieved. Curettage of the lesion was done.
Conclusion
Foreign bodies may be ingested, inserted into a body cavity or deposited into the body by a traumatic or iatrogenic injury. A thorough examination of the site should be done. Any such foreign bodies left behind would lead to infections.

EP-O101
Methicillin Resistant Staphylococcus Aureus

Tejashree Pangare

Dr D Y Patil Dental College and Hospital, Pune

Abstract
Methicillin resistant staphylococcus aureus methicillin-resistant staphylococcus aureus (MRSA) is a type of Staphylococcus that is resistant to certain antibiotics, such as methicillin, oxacillin, penicillin, and amoxicillin. This nosocomial pathogen has become a great threat in hospitals globally. These infections can be very contagious and difficult to treat. MRSA occurs in two forms: hospital-associated and community-associated Hospital-associated or -acquired MRSA infections occur not only in hospitals, but also in long-term-care facilities/nursing homes, dialysis centers, and other outpatient care facilities. Modes of transmission include urinary catheters, surgical procedures, and dialysis ports. Patients who contract these infections are usually those with compromised immune systems. This poster highlights the importance of timely diagnosis of MRSA and the use of appropriate infection control protocols in the prevention of MRSA.

EP-O102
Surgical Anatomy of Lateral Eyebrow Incision: How Lateral Can We Go Laterally??

Shaji Thomas, Darpan Bhargava, Ankit Pandey

People's College of Dental Science and Research Centre

Abstract

Background

Injury in supraorbital region or extended incision of lateral eyebrow laterally may cause injury to branch of temporal nerve supplying orbicularis oculi and occurrence of lagophthalmos. Therefore, a study was done to measure the average distance of temporal nerve from lateral canthus of eye to prevent lagophthalmos.

Objective

This study was undertaken to determine the extent of lateral eye brow incision in relation to temporal branch of facial nerve and to assess the exact surgical anatomy of the nerve supply to orbicularis oculi muscle.

Materials and method

The temporal branch of facial nerve is dissected in 10 cadavers (20 sites) and the distance of superior branch of temporal nerve entering the orbicularis oculi muscle is measured in relation to lateral canthus of eye. The average distance obtained in our study is compared with values obtained by other authors.

Results

The average distances between temporal branch and lateral canthus of eye were obtained and are discussed in relation to its surgical implications for lateral brow incisions.

Conclusion

Temporal branch of facial nerve may get damaged if the lateral eye brow incision is overextended laterally. The damage of temporal branch of facial nerve while giving lateral eyebrow incision may result in incomplete closure of upper eyelid. In our study the anatomical landmarks to localize the temporal branch of facial nerve and precautions that needs to be kept in mind for extending the lateral eyebrow incision laterally are analyzed and discussed.

EP-O103
Advancement in Atraumatic Exctraction

Vaishali B Pagare

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Abstract

Traditional means of exctraction of teeth involves elevation or luxation of teeth with conventional foreceps and elevators or elevation of mucoperiosteal flap that often result in damage, ranging from mild gingival tissue laceration, ridge deformation to the complete loss of buccal bony plate.other complications are like trismus, dry socket, post-operative pain, that preclude tretment of dental implant or result into subpontic food trap when traditional fixed dentures are used.we want to highlight some modern techniques of atraumatic extraction like physics foreceps, powered periotome that preserves bone and gingival archiecture and allows for the option of future dental implants.

EP-O104
Comparison of Buccal Fat Pad, Collagen and Human Amniotic Membrane In Surgical Management of Stage III, IV Oral Submucous Fibrosis

Neelakamal Hallur, Aaisha Siddqua, Syed Zakaullah, Ashwin Shah, Chaitanya Kothari, Shereen Fathima, Meenakshi Kothari, Juhi Shabnam, Jeevan Tej Rs

Al badar Rural Dental College and Hospital

Abstract

Introduction

Oral submucous fibrosis is a crippling condition of mouth leading to reduced opening of mouth. The mainstay of surgical treatment is concentrated on to improve mouth openingand relieve the symptoms by surgical means. Based on the contracture various graft materials are available.

Aims & Objectives

To compare the three graft materials: Buccal Pad of fat (BFP), Collagen & Human amniotic Membrane (HAM) in management of stage III & IV oral sub mucous fibrosis.

Methods

This study was conducted on thirty patients, divided into 3 equal groups with stage III & IV OSMF. The standard surgical protocol followed was transection of bands, masticatory muscle myotomy, Coronoidotomy with a resultant increase in intra operative mouth opening of around forty millimeters. Resected site was covered with pedicled BFP graft, Collagen and HAM in group I, II & III respectively.

Results

On statistical evaluation, sixth month followup showed mouth opening of 30.8 mm in BFP, 32.7 mm in Collagen and 35.2 mm in HAM.

Conclusion

Collagen showed better wound granulation and wound epithelisation but increased wound contracture and reduced mouth opening as compared to BFP and HAM. HAM showed better mouth opening on long term follow up when compared with other two groups.

EP-O105
Bilateral Parry-Romberg Syndrome-A Rare Case Report of a Unique Osteotomy Technique

R S Neelakanthan, Aparna Murugan

Meenakshi Ammal Dental College

Abstract

Parry Romberg syndrome (PRS) is a rare acquired poorly understood syndrome of unknown etiology, described in the nineteenth century

by Caleb Parry and Moritz Romberg, characterized by acquired and slowly progressive atrophy of usually half of the face including dermis, subcutaneous tissue, fat, cartilage and bone. The incidence is one in seven lakh, 5–10 % of which occurs bilaterally with a female to male predilection of 3:2. Apart from the multifactorial aetiology proposed, the possible primary cause is mainly attributed to the cerebral disturbance of the fat metabolism, due to a genetic alteration in the first stage of embryogenesis of the central nervous system and the distribution generally follows the pattern of sensory innervation of trigeminal nerve. Surgical techniques commonly used to treat individuals with Parry-Romberg syndrome include fat or silicone injections, flap/pedicle grafts, bone grafts or implants and extensive facial reconstruction procedures. Herewith we present a case of bilateral Parry Romberg syndrome in a 23 year old male patient associated with a clinical evidence of mid face deficiency with paranasal and zygomatic hollowing on either side with normal class I occlusion. The case is being presented for its unique mid-face degloving approach and a totally innovative pedicled orbito-zygomatico-maxillary osteotomy to advance the entire hypoplastic mid-face component without disturbing the existing occlusion. This surgical approach to the midfacial skeleton and the genuineness of the osteotomy design negates visible scarring on the face and bone grafting respectively.

EP-O106
Dry Socket or Alveolar Osteitis

Mohit Kaushik

Swami Devi Dayal Dental College and Hospital

Abstract
Alveolar osteitis or dry socket is one of the commonest and dreadful complication following extraction of teeth. Pain of the dry socket typically begins on the 3rd–5th post-operative day accompanied by dissolution/loss of blood clot. It's clinical features include an empty socket with visible bony walls, dull aching/throbbing pain, halitosis etc. This poster aims to discuss the predisposing factors, prevention and management of this condition.

EP-O107
Craniofacial Skull Base Osteotomies

Amardeep Arun

Peoples Dental Academy

Abstract
During a five year period 150 craniofacial access osteotomies for skull base access have been performed allowing direct exposure of pathology in difficult anatomical areas with minimal complications. These approaches have been developed by considering the craniofacial skeleton as a single osteoplastic structure. Bone segments are mobilized and replaced using rigid fixation. In this way osteotomies can be planned which significantly improve access and preserve form and function in the complex region of the skull base.

EP-O108
Comparison of Changes in Gastrointestinal Tract with Those in Oral Cavity in Patient of Oral Sub Mucous Fibrosis

Vaibhav Pratap Singh, Satya Prakash Gupta

Chandra Dental College and Hospital Safedabaad Barabanki

Abstract
Oral sub mucous fibrosis affects the oral mucosa and along with this, the involvement of esophageal mucosa has been reported. There is paucity of studies describing the esophageal involvement. The posliv depicts on simultaneous correlation of change occurring in gastrointestinal mucosa and oral cavity. Endoscopic examination of gastrointestinal mucosa done to access the changes.

EP-O109
Study the Past to Define the Future -Clinical Audit—Our Experience…

Vivek, Saravanan, Jones Sudhakar

SRM Kattankulathur Dental College

Abstract
Research is to generate new evidence to develop a hypothesis as a result of which a new practice may be developed. clinical audit aims to improve quality of patient care and clinical outcomes through the peer- led review practice against fixed golden standards. In this poster we present the applications of clinical audit from identifying a clinical problem, zeroing in on the potential causes, suggesting and implementing changes, monitor its implementation and establishing improvement of the original clinical problem. This study Post-operative infections of maxillofacial trauma is based on retrospective analysis of clinical records of all maxillofacial trauma patients who had attended our hospital between March and May of 2015. clinical audit is an effective tool to ensure whether evidence based practice is based on clinical effectiveness.

EP-O110
Evaluation of Cryotherapy in Management of Trigeminal Neuralgia

Prashant Soni

Career Post Graduate Institute of Dental Sciences and Hospital

Abstract
I am presenting a case of Trigeminal Neuralia of my study who was treated by cryotherapy. I am using this therapy on maximally affected and easily accessible infra orbital and mental nerves. Our motto of using cryotherapy is restoration of normal sensation of nerve after surgery without pain. I use N2O as cryo agent with Bosco cryo kit in three cycles of freezing and thawing for 1–1 min. I show in 6 months followup restoration of normal sensation in the distribution of treated nerve without pain.

EP-O111
Ludwig's Angina: An Emergency

Bharat Shukla, Madan Mishra

Sardar Patel Post Graduate Institute of Dental and Medical Science

Abstract
Background
Ludwig's angina is a potentially life threatening diffuse cellulitis involving the floor of the mouth and submandibular regions bilaterally and causing progressive airway obstruction. Typically, Ludwig's angina is characterized by fever, malaise, dyspnoea, dysphagia as well as a brawny hard tender swelling of the floor of the mouth and neck. In most instances it develops as a complication of an odontogenic infection usually from the second and third molars. Onset and progression to fatality is rapid in ludwig's angina. Many clinicians are unfamiliar with these conditions as these conditions have become less common in postantibiotic era. Its tendency to cause oedema, distortion and obstruction of airway pose a great challenge for treating physicians and anesthesiologists and can even be lethal. Early recognition of potential cases, discussion with patient party, appropriate referral, aggressive antibiotic and timely surgical intervention are very much important to reduce morbidity and mortality of Ludwig's angina.
Objective
To evaluate the treatment outcomes, associated morbidity and survivability following Ludwig's angina.
Methodology
Our experience with review of literature in management of patient suffering from Ludwig's angina Discussion Ludwig's angina is a dramatic, life-threatening, soft tissue infection of the floor of the mouth and neck. If vigilant for its clinical presentation and aware of its potential for rapid compromise of the patient's airway, clinicians can intervene early in order to prevent its most dire consequences. The classic manifestations of these infections, such as high fever, systemic toxicity, and local signs may be absent due to widespread use of antibiotics and/or profound immunosuppression. Their tendency to cause oedema, distortion and obstruction of airway pose a great challenge for treating physicians and anesthesiologists and can even be lethal. Airway control is of paramount importance, and attention to this consideration, combined with antibiotic therapy, surgical drainage, and modern intensive care, have all contributed to a declining mortality. Early and liberal consultation with otolaryngology and anesthesiology services will assure the greatest hope for speedy airway control, prompt institution of intravenous antibiotic therapy, and an uncomplicated recovery from this rare and dreaded condition.

EP-O112
Simultaneous Surgical Correction of Obstructive Sleep Apnoea and Post TMJ Ankylosis Defect

M. R. Muthusekhar, Yogaen Vohra

Saveetha Dental College, Chennai

Abstract
Background
Various treatment modalities exist for treatment of obstructive sleep apnoea and post TMJ ankylosis defects. In the poster, we present a case in which there was requirement for both. A novel technique (reverse sagittal split osteotomy- orthomorphic, morphometric correction) is described which aims for simultaneous correction.
Objective
Objective of the surgery was to correct obstructive sleep apnoea and post TMJ ankylosis defect.
Methodology
Reverse sagittal split osteotomy on the unaffected side of mandible including region with geniohyoid and genioglossus attachment was carried out. Repositioning was done to simultaneously correct obstructive apnoea and the post TMJ ankylosis defect. It was followed by fixation of autogenous iliac bone graft to fill the gap.
Results
There was improvement in the patient's condition. The surgery also led to better esthetics.
Conclusion
This is a novel technique which may be used for simultaneous correction of obstructive sleep apnoea and post TMJ ankylosis defects.

EP-O113
Role of Endoscopy in Oral and Maxillofacial Surgery

Saif Ali

Babu Banarasi Das College of Dental Sciences

Abstract
Background
Recent advances in technology have led to the emergence of minimally invasive techniques like endoscopy to be used in various aspects of maxillofacial surgery. Endoscopic procedures have broadened the frontiers of our speciality. There are many advantages of using this minimally invasive technique such as less postoperative healing time and better patient compliance.
Objective
To illustrate the application of endoscopy in various oral and maxillofacial procedures.
Methodology
Many aspects of maxillofacial surgery like trauma, dental implantology, surgeries of the maxillary sinus, esthetic procedures, TMJ disorders and also jaw pathologies can be adequately diagnosed and also effectively treated using endoscopic techniques. Fiberoptic endoscopes used in maxillofacial procedures are long flexible tubes filled with fibre-optic glass rods which convey the image to the camera or directly to the operator's eye, making it easier for the surgeon to visualize the surgical field clearly with minimal invasion.
Results
With the use of endoscopy in various maxillofacial surgeries, patients have benefited from this technology, since they experienced less pain and swelling, shorter hospital stays, and fewer overall complications when compared with the standard maximally invasive procedures. Conclusion: Endoscopy is one of the minimally invasive procedures performed. The accuracy and versatility of this technique has led to its worldwide use in various surgical procedures. Endoscopy has been one of the main diagnostic and therapeutic modalities for respiratory and gastrointestinal diseases. Its use in maxillofacial surgery has simplified many procedures for further research. This poster presents a general review of use of endoscopy in maxillofacial surgery.

EP-O114
Tissue Engineering for Accelerated Bone Healing in Oral and Maxillofacial Surgery

Priyanka R. Sawadkar

D. Y. Patil School of Dentistry, Navi Mumbai

Abstract

Aim

To highlight awareness of various approaches ranging from cell based to scaffolded strategies, osteogenic growth factors & genetic engineering combined to developed effective concepts for treatment of extensive loss of osseous tissues.

Objective

To create interdisciplinary approach in order to establish new strategies for therapy of bone defects.

Materials

Platelet-Rich Plasma (PRP), Platelet-Rich Fibrin (PRF), Freeze Dried Bone Allograft (FDBA), Demineralized Freeze Dried Bone Allograft (DFDBA), Platelet derived Growth Factor (PDGF), Basic Fibroblast Growth Factor (bFGF), Insulin Growth Factor (IGF), Transforming Growth Factor Beta (TGFbeta), Vascular Endothelial Growth Factor (VEGF), Bone Morphogenic Protein (BMP), Recombinant Protein therapy & Gene therapy, Cell based therapy.

Conclusions

In the field of Oral and Maxillofacial Surgery, tissue engineering is a relatively new & promising field which can promote wound healing by incorporating the recent advances in molecular, cellular biology & physiology. All the above factors may contribute to an accelerated tissue regeneration process.

EP-O115
Computer Assisted Navigation in Oral & Maxillofacial Surgery

Nupur Jain

RCDSR

Abstract

Computer assisted surgery represents a surgical concept and set of methods, that use computer technology for surgical planning, and for guiding or performing surgical interventions. It is also known as computer aided surgery, computer assisted intervention, image guided surgery and surgical navigation. CAS has been a leading factor in the development of robotic surgery. It has been used in oral surgery for bone segment navigation in orthognathic surgery, temporo-mandibular joint surgery, reconstruction of mid face and orbit and implantology. This poster illustrates its various uses in oral and maxillofacial surgery.

EP-O116
Efficacy of Use of PRF in Various Minor Oral Surgical Procedures

Pranay Kumar

Abstract

Healing process following trauma or a surgical procedure is a challenging issue for surgeon. PRF was first introduced by Choukroun for use in oral and maxillofacial surgery. This technique requires neither anticoagulant nor bovine thrombin. It is nothing more than centrifuged blood without any addition. PRF is an autologous source of growth factor that stimulates and accelerates osteoid production and soft tissue regeneration. In our institute we evaluated the use of PRF in cystic enucleation, in extra oral wounds, sinus augmentation and implant placement. There was significant improvement in cases where PRF was used with no or minimal scarring and early bone regeneration and maturation.

EP-O117
Piezosurgery Vs Conventional Method in Direct Sinus Lift Procedure

Neha Borkhade, Mukul Padhye, Geetanjali

D. Y. Patil Dental College, Nerul, Navi Mumbai

Abstract

Aim

To Study and compare the intraoperative and post-operative effects of piezosurgery and conventinal rotative instruments in direct sinus lifting procedure.

Patients and Methods

Twenty patients requiring direct sinus lifting were enrolled. The osteotomy and sinus membrane evaluation were performed either with piezosurgery tips or handpiece and steel burs. Time elapsed between bony window opening and completion of membrane elevation (duration), visibility of the operation site, postoperative pain, swelling, phonetics, daily routine, and as well as patient's experience before and after the operation were evaluated.

Results

There was no significant difference between Piezosurgery and conventional groups regarding duration, and operation site visibility as well as patient's experience before and after the operation. However, there were significantly more pain and swelling in the conventional group compared with the Piezosurgery group.

Conclusion

Sinus lifting procedure performed with Piezosurgery causes less pain and swelling postoperatively compared with conventional technique. Patient's daily life activities and experience about the operation are not affected from the surgical technique.

EP-O118
Evolution in Diagnostic Aids in Oral and Maxillofacial Surgery

Pritam Chaudhari

ACPM Dental College, Dhule

Abstract

This poster describes in detail about the evolution of diagnostic aids used in treatment planning in oral and maxillofacial surgery. In old times diagnosis was based on the history given by patient and clinical features manifested by the disease. The treatment was also based on clinical diagnosis made by the surgeon only. With newer development that was made in the field of medical sciences the era of radiographs came. Further research and development gave birth to newer imaging modalities such as MRI, CT-SCAN as well as newer Biopsy techniques. All these helped narrow down from broad range of differential

diagnosis to a more specific diagnosis. With the advent of CBCT, Micro computed tomography, Regenerative nanotechnology, Navigational surgeries and Robotics it has become very simple to arrive at the correct diagnosis and it turn provide a better surgical treatment to the patient.

EP-O119
Use of Vascularised Nasal Septal Graft in Orbital Floor Reconstruction

Parag Targe

ACPM Dental College, Dhule

Abstract
This poster represents the reconstruction of orbital floor by use of vascularized nasal septal graft. Nasal septum is a osseocartilagenous partition in between two halves of nasal cavity.Blood supply of nasal septum-a) anterosuperior part by anterior ethmoidal artey, b) posreoinferior part by sphenopalatine artery, c) anteroinferior part by superior labial branch of facial artery, d) posterosuperior part by posterior ethmoidal artery. Venous drainage-a) anteriorly in facial vein, b) posteriorly in sphenopalatine vein to pterygoid venous plexus. Nerve supply-a) anterior part-internal nasal branch of anterior ethmoidal nerve, b) anteroinferior part-anterosuperior alveolar nerve, c) postero-inferior part-nasopalatine branch of pterygopalatine ganglion, d) postero-superiorpart-medial superior and posterior nasal branch of pterygopalatine ganglion. Lymphatic Drainage-a) Anterior Half-submandibular nodes, b) Posterior half-Retropharyngeal and deep cervical lymph nodes. Nasal septal graft is pedicle type graft. Nasal septal graft is easily accessible and low donor site morbidity and also adequacy and appropriateness of size. It is used in cases of maxillectomy involving excision of orbital floor. The graft can be harvested with same surgical approach and orbital floor reconstruction done. This nasal septal graft used to prevent the complcations like hooding of eyeball, enophthalmos, and diplopia. As it is autogenous type so chances of infection and resorption are negligible. Here with we are presenting five cases operated with nasal septal graft.

EP-O120
Derma-Roller Micro-needling for Facial Scar Attenuation: A New Friend of Oral and Maxillofacial Surgeon

M. I Parker, Nilesh Kumar, Alpesh Vaghasiya

Krishana Institute of Medical Sciences, Karad

Abstract
Micro-needling with derma-roller is a new, minimally invasive modality for the management of facial scars. Derma-roller is a drum shaped device with multiple micro-sized needles, which pierce the skin for percutaneous collagen induction. The technique of micro-needling has shown to increase the skin remodeling by creating thousands of microscopic channels which increase the formation of new tissue by activating body's wound healing cascade (hemostasis-inflammation-proliferation tissue remodeling). The micro-channeling also causes the release of growth factors that promote scar-less healing and deposition of normal woven collagen, rather than scar collagen. Various applications of the derma roller micro-needling have been recently described in the maxillofacial region. The device has been used to remove facial wrinkles, acne and surgical atrophic scars. It also helps to enhance the penetration of skin care and hair growth products. Its application for post-traumatic facial scar attenuation has been widely reported. This poster intends to present and highlight various applications of percutaneous collagen induction by derma-roller in maxillofacial region for management of facial scars.

EP-O121
Role of Sclerosing Agents in Treatment of Vascular Malformations

Gaurav Singh, Sharad Chand, Bharat Vashishat

Sardar Patel Post Graduate Institute of Dental & Medical Sciences, Lucknow

Abstract
Vascular-malformations (VM) are characterized by thin non-proliferating endothelial wall surrounded by a thin smooth muscle layer. They have devastating cosmetic effects in addition to being associated with pain and bleeding. Sclerotherapy is a viable option for the management of VM's due to its safety, ease of administration, and acceptable aesthetic and functional outcomes.By using sclerotherapy, surgical intervention can often be avoided or at least minimized.
Objective
The aim of this study was to compare the clinical results of Sodium-tetra-decyl-sulphate on vascular malformations.
Methodology
Management of the arterio-venous malformation using Intra- lesional injections of sodium-tetradecyl-sulfate (60 mg- 1 ampule of SETRAL injection was administered every week till 4 weeks) to the lesion.
Discussion
Management of VM is dependent on size, location and often surgeon preference and comfort. Small VM's can be completely excised. However, complete surgical eradication of extensive oral or facial venous malformation is rarely possible without jeopardizing function or causing additional disfigurement and/or severe hemorrhage. Sclerotherapy is a safe and effective treatment with minimal morbidity. STS is a widely used sclerosing agent.
Results
Complete resolution of the lesion was found after sclerotherapy. The most common side effects were skin necrosis and ulceration, hypersensitivity and swelling.
Conclusion
Sclerotherapy with direct intra-lesional injection of 3 %STS solution is simple, safe and effective therapy for managing head and neck VM's, though it does not resolve larger venous malformations it does decreases the size and vascularity to facilitate future surgery or act as a palliative treatment.

EP-O122
Pre-Operative Preparation of Patients in Oral & Maxillofacial Surgery

Sthita Gurrala, Vikas Dhupar, Francis Akkara

Goa Dental College & Hospital

Abstract
Pre-operative preparation of the patient requiring surgery to optimize post-operative outcomes is extremely important prior to any invasive

procedure, regardless of whether the procedure is minimally invasive or a radical surgery. This may be done the day before the surgery in the hospital or during the week before surgery or on outpatient basis and is essential to gather all information to organize anesthetic, surgical and post -operative care before the surgery. It is a multidisciplinary approach of anesthetic, surgical team, radiologist, pathologist and operation room staff, the ultimate goal of which is to reduce the patients surgical and anesthetic perioperative morbidity or mortality. This poster presents the protocol for pre- operative preparation of patients in Oral & Maxillofacial Surgery.

EP-O123
Comparision of Efficacy of 2 % Lidocaine, and 0.75 % Ropivacaine Activity In Qualitative and Quantitative Analgesia During Surgical Extraction of Impacted Mandibular 3rd Molars

Neelakandan, K Sreekumar, Raj Kumar Tiwari

Meenakshi Ammal Dental College and Hospital, Chennai

Abstract

Aim

The aim of this study was to compare anesthetic latency and duration of lignocaine and ropivacaine in surgical extraction of impacted mandibular third molars.

Methods

A prospective randomized double-blind clinical trial was conducted on 29 subjects planned for elective surgical removal of impacted mandibular third molars. The parameters considered were latency, duration of anesthetic effect and the need for re-anesthesia for the surgical procedure. A visual analog scale was used to score pain pre-operative, intra-operative and post-operative.

Results

Ropivacaine was good alternatives for Lignocaine. The duration of action and intensity of local anesthesia were seen to be superior to lignocaine.

Conclusions

Alternative agents of local anesthesia ropivacaine with superior clinical actions must be considered according to nature and duration of procedures in dentistry.

EP-O124
Lasers In Oral & Maxillofacial surgery

Gujjula Mukeshreddy

Government Dental College & Hospital, Vijayawada

Abstract

Lasers are becoming more intrinsic to the practice of oral and maxillofacial surgery. With emerging new technology, increasing number of procedures are made possible through use of lasers. Lasers have gradually become a valuable and reliable tool in the oral and maxillofacial surgery armamentarium over the past ten years. Lasers have a number of advantages over other methods of surgery including decreased bleeding and scarring, decreased post-operative swelling, less post-operative pain and ease of access to difficult sites. Improved tissue healing, more precise control of depth of tissue penetration can be obtained with use of laser. The most commonly used lasers are the co2 and Er:Yag lasers. This poster highlights the application of lasers in oral and maxillofacial surgery.

EP-O125
Stem Cell Therapy—The Future of Maxillofacial Surgery

T. Prathima

Government Dental College & Hospital, Vijayawada

Abstract

Cells with unique capacity for self-renewal and potency are called stem cells. There are two primary sources of stem cells adult stem cells and embryonic stem cells. The embryonic stem cells are pluripotent as they can develop into all types of cells from all three germinal layers while the adult stem cells are multipotent, they can only differentiate into a limited number of cell types. These cells can be isolated and harvested from the dental pulp. The discovery of dental stem cells and recent advances in cellular and molecular biology have led to the development of novel therapeutic strategies that aim at regeneration of oral tissues that were injured by disease or trauma. Dental stemcell research has given newer conceptual approach to therapy of various diseases named 'REGENERATIVE DENTISTRY' and it will have its place in the regeneration of tooth and craniofacial defects.

EP-O126
Sialoendoscopy

V. Abhishek

Government Dental College & Hospital, Vijayawada

Abstract

Sialoendoscopy minimally invasive surgical techniques provide the oppurtunity for safer and less invasive surgery. Sialoendoscopy has been proven to be most effective for treating salivary gland obstructions those caused by mucous plugs, foreign bodies, sialolithiasis and strictures or adhesions. This technique also has the prospect for gland sparing, restoration of normal function and can also be used in cases of salivary oncology with caution.other applications include lysis of adhesions and sialoendoscopic biopsy. This poster highlights the techniques, applications and complications of sialoendoscopy.

EP-O127
Current Trends in Management of Maxillofacial Gunshot Injuries

Zubair Ahmad

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Abstract

Gunshot injuries are on a rise in both developed and developing countries, the reason for this may be increased access to fire-arms. It

causes profound morbidity and significant mortality. Those involving the head and neck can be devastating especially when they affect vital organs. Their propensity to cause an interference with the three basic tenets of life support, e.g. airway, breathing and circulation makes them life threatening and debilitating, functionally, aesthetically as well as psychologically. The extent of tissue damage depends on internal lacerations, compression of tissues and the temporary cavitation along the projectile path. Tissue damage is both direct and as a result of energy dissipated from the inherent kinetic energy transferred to the tissues. The ideal time and method of treatment remains a constant issue of debate however it not only involves with saving patient's life, but also correlates with both functional and morphological effects. In our poster we are going to highlight some recent advancement invb the management of gunshot injuries in oral and maxillofacial region along with recent guidelines for the same.

EP-O128
Short Term Evaluation of Gustatory Changes After Surgical Removal of Mandibular 3rd Molar-Randomized Controlled Trial

Rahul Anand, Prabhushankar

Meenashi Ammal Dental College and Hospital

Abstract

Objective

To evaluate the changes in gustatory sensation after surgical removal of third molar with claussen's 5-komponent chemo-gustometry and to establish a correlation between difficulty index of impacted tooth and incidence of gustatory changes.

Study design

Single blinded randomized controlled trial with intra-subject measure of 60 patients undergoing surgical third molar removal. Gustatory function were evaluated in each subject preoperatively, on pod 10th and pod 3 month using claussen's 5-komponent chemo-gustometry with three concentrations of five different salts (NACL, Sucrose, Citric acid, Phenylthiourea, and Quinine hydrochloride). All patients filled a questionnaire to assess subjective perceptions.

Result

Intensity ratings for solutions in the test were reduced by approximately 38 % for NaCl, citric acid, and quinine hydrochloride at 10th days after surgery which returned to normal at the end of 3 months with exception of 1 subject. Patients with the most severely impacted molars with Pederson index score 7 to 8 highest incidence for suprathreshold taste change.

Conclusion

Gustatory deficits occur after third molar extraction, appear to be associated with depth of impaction. Surgical removal of mandibular third molar under local anesthesia may cause minimal gustatory impairment due to compression or damage to the chorda tympani associated with lingual nerve which remains undetected in most of the patients for short term. Patients with severely impacted 3rd molar should be informed prior regarding probable risk of increase taste threshold.

EP-O129
Lagophthalmos

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Sri Aurobindo College of Dentistry, Indore

Abstract

Lagophthalmos is defined as the inability to close the eyelids completely. Ocular complications from facial nerve paralysis can be quite devastating. Facial nerve paralysis results in cosmetic as well as functional problems. Paralysis of the upper eyelids leads to lagophthalmos, which results in incomplete closure of the lid over the cornea, leading to potential complication of corneal ulceration. The management of the affected eye in patients with facial palsy has been improved. Previously, ointment, eyedrops, taping, partial or complete tarsorrhaphy was the primary treatment for inability to close the eyelid. Other mechanical techniques for reanimating lid closure are palpebral spings, encircling the upper and lower eyelids with silicone or fascia lata and temporalis muscle transfer. The most popular and widely used static procedure in facial nerve palsy is the upper eyelid gold weight implant. Gold eyelid implants are designed for the gravity assisted treatment of the functional defect of lagophthalmos resulting from facial paralysis. We report a case of a patient with facial paralysis who underwent gold weight implantation of the upper eyelid for correction of lagophthalmos.

EP-O130
Use of Platelet Rich Fibrin in Maxillofacial Region

Zulfikarali Ghodesawar

Oxford Dental College and Hospital

Abstract

Use of Platelet Rich Fibrin In Maxillofacial Regions. Platelet-Rich Fibrin (PRF) is a second generation platelet concentrate used for wound healing post oral and maxillofacial surgeries. Platelet-rich fibrin (PRF) was first described by Choukroun et al. in France. It has been shown to have several advantages over traditionally prepared PRP (Platelet rich plasma). Its chief advantages include ease of preparation and lack of biochemical handling of blood, which makes this preparation strictly autologous. Platelet rich fibrin (PRF) is a fibrin matrix in which platelet cytokines, growth factors, and cells are trapped and may be released after a certain time. PRF is in the form of a platelet gel and can be used in conjunction with bone grafts, which offers several advantages including promoting wound healing, bone growth and maturation, graft stabilization, wound sealing and hemostasis, and improving the handling properties of graft materials. PRF can also be used as a membrane. Platelet gel has been used successfully in the area of reconstructive oral and maxillofacial surgery in conjunction with ablative surgery of the maxillofacial region, mandibular reconstruction, surgical repair of alveolar clefts and associated oral-antral/ oral-nasal fistulas, and adjunctive procedures related to the placement of osseointegrated implants.

EP-O130
Evaluation of Tongue Movements and Airway Assessment in Anterior Mandibular Defects

Reena John, Prabhu. P

Vinayaga Mission Dental College

Abstract
Anterior segmental resection of mandible is commonly advocated for the treatment of midline mandibular tumors. When the anterior mandible is resected, the insertion of the tongue muscles to the mandible is severed. It is believed that, this may result in post-operative tongue fall causing compromised airway. This poster describes the assessment of the tongue movements and airway patency following resection of anterior mandible.

EP-O132
Botox in The Management of Gummy Smile

Namoos

Himachal Institute of Dental Sciences

Abstract
The value of an attractive smile is undeniable.the frame work of a smile is formed by the lips, teeth and the gingiva.excessive gingival display during smile is considered less pleasing, when an excess of gingiva superior to the maxillary anterior teeth is displayed upon full smile, it is termed a gingival smile or gummy smile.one cause of excessive gingival display is the muscular capacity to raise the upper lip higher than average.several surgical procedures have been reported to improve the condition, but surgery always involves risk and is costly.botulinum toxin type A (BTX-A) (Botox, Allergan, Irvine, CA) has been studied since the late 1970^{TM}s for the treatment of several conditions associated with excessive muscle contraction.injection with BTX-A at preselected sites is a novel, cosmetically effective, minimally invasive alternative for the temporary improvement of gummy smiles caused by hyperfunctional upper lip elevator muscles. The aim of this poster presentation is to discuss the adventages, disadventages, the technique and the final outcome in a gummy smile patient.

EP-O133
A New "Platinum" Standard for Bone Grafting: Autogenous Stem Cells

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Abstract
A mesenchymal stem cell is a primitive cell with a ability to differentiate into multiple tissue. Bone graft can be defined as an implanted material that promotes bone healing alone on in combination with other materials, through osteogenesis, osteointergration, and osteoconduction in combination or alone. Autogenous bone has long been considered the standard of all bone grafting materials. However, complications have been associated with autogenous bone-harvesting procedures, grafting with autogenous bone marrow aspirate, may become a new modality. Bone marrow can be extracted from the large flat bones of the body with relative ease and safety, and it provides a rich source of adult stem cells as well as growth factors that facilitate osteogenesis. Mixed with a resorbable matrix or scaffold, bone marrow aspirate has the potential to reconstitute various bony defects in the mouth to reconstruct the severely atrophic maxilla and mandible.

EP-O134
3D Printing- A New Boom for Omfs

Anushri Bajaj

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Abstract
Background
New technology has always been the stick that has enhanced the field of medicine. One such technology is 3Dimensional Printing.
Objective
3D printing or additive manufacturing refers to making a 3 dimensional object. With the ink being titanium powder on the implant which is customizable to the patient and it can be placed in the patient.
Methodology
Here the ink used in titanium powder where a cross section of the implant to be made is etched and then lasers are used to fused together to form the subsequent layer. The data is collected through CAD system which is translated into a language which can be understood by the printer.
Results
After 4–6 h, depending upon the size of the implant to be made, the model is ready and can be placed in the patient. It reduces the operation time and also reduces the risk to the patient.
Conclusion
Though this technology is there from the 1950 s, in the field of OMFS, its use was first seen in 2008. Right now, the only deterring factor to this is the cost of the printer and knowledge of how to handle it.

EP-O135
Space Infection Management in Post Irradiated Patient

Sagar. G

Farooqia Dental College and Hospital

Abstract
Patients with head and neck cancer not only cope with life threatening disease but also adverse effects of cancer therapy like mucositis, xerostomia secondary to salivary gland dysfunction, dysphagia, dysgeusia, caries, periodontal disease, infection, trismus, osteoradionecrosis, growth and developmental disturbances, leading to severe impairment of oral function and affecting quality of life. Numerous studies suggest preexisting dental diseases are major risk factors for oral complications post irradiation. Space infections of dental origin in post irradiated patients comprises one such complication. Identification of oral foci of infection is critical in patients about to undergo chemoradiation in oral malignancy. A thorough

clinical examination with radiographs will help in screening for teeth with chronic endodontic pathology, assessing 3rd molar, gauging the overall severity of bone loss across the dentition and any acute pulpal/periapical pathologies. All these dental and oral pathologies have to be addressed before initiation of chemoradiation to avoid osteoradionecrosis. Ideally, extractions should take place 7–10 days prior to the commencement of chemoradiation provided patient's hematological status is acceptable and support with prophylactic antibiotics is normally considered mandatory when the granulocyte count is less than 2000 mm3, and platelet transfusion if the platelet count is below 40 000 mm3. We hereby report a case of left submandibular, submental and sublingual spaces in a 50 year old female, 2 weeks after irradiation for cancer of posterior wall of pharynx. Incision and drainage was carried under LA and the challenges in the management are discussed.

EP-O136
Management of Facial Scar

Anukriti Mehta

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Abstract
Scarring is an outcome of any wound that violates the integrity of skin. It can be due to soft-tissue trauma, or it can be an iatrogenic injury. It is an inevitable and necessary aspect of healing. To minimize scar formation, current standard of care in acute management of surgical incisions includes irrigation and cleansing, multilayered, tension-free closure with precise approximation and eversion of wound edges, judicious use of suture material, use of postoperative moisture barrier, or dressing and early removal of surgical sutures. Any surgeon who operates on the face should be familiar with methods of designing incisions to minimize aesthetic deformity. There are many techniques that can be utilized for scar revision and prevention. Knowledge of the anatomy of the skin, skin physiology and biomechanics, principles of wound healing, scar revision and facial aesthetic principles and surgical geometry of soft-tissue surgery can improve unsightly or functionally significant scars. The purpose of this poster is to present various treatment modalities for management of facial scar.

EP-O137
Ozone Therapy: A Revolution in Dentistry

Jeevanlata, Akshay Thakur

Pb. Govt. Dental College & Hospital, Amritsar

Abstract
Background
In 1839, Christian Friedrich Schonbein, first noticed the emergence of a pungent gas with an electric smell. According to the Greek language, he called it ozone and presented a lecture entitled on the smell at the positive electrode during electrolysis of water at the Basel Natural Science Society. Ozone therapy has a long history of research and clinical application with humans. The first medical application was in 1870 when C. Lender purified blood in test tubes. Interestingly enough, in 1930, a German dentist, E.A. Fisch, used ozone on a regular basis in his dental practice in Zurich, Switzerland, and published numerous papers on the subject. Ozone (O3) is a triatomic molecule, consisting of three oxygen atoms, and its application in medicine and dentistry has been indicated for the treatment of almost 260 different pathologies. The ozone therapy has been more beneficial than present conventional therapeutic modalities that follow a minimally invasive and conservative application to dental treatment. The exposition of molecular mechanisms of ozone further benefits practical function in dentistry.
Conclusion
Ozone therapy is a versatile bio-oxidative therapy in which ozone is administered via gas or dissolved in water or oil base to obtain therapeutic benefits. In contrast with traditional medicine modalities such as antibiotics and disinfectants, ozone therapy is quite economical; it will markedly reduce both medical cost and invalidity. It lessens treatment time and also makes the treatment painless. Further research is needed to regulate indications and treatment procedures of ozone therapy.

EP-O138
Cone Beam Computed Tomography—A Recent Diagnostic Modality

Dipjyoti Patgiri

Vyas Dental College and Hospital

Abstract
Cone beam computed tomography is the latest advancement in the diagnostic imaging that has begun to emerge as a potentially low dose cross sectional technique for visualizing bony structures in the maxillofacial region. The value of CBCT imaging in implant planning, surgical assessment of pathology, TMJ assessment and pre and postoperative assessment of craniofacial fractures has been reported. In orthodontics, CBCT imaging is useful in the assessment of growth and development. Studies have shown that CBCT contributes to optimal risk assessment and as a consequence, to more adequate surgical planning, compared with panoramic radiography in difficult third molar surgeries. CBCT imaging provides clinicians with submillimeter spatial resolution images of high diagnostic quality with relatively short scanning times (10–70 s) and a reported radiation dose equivalent to that needed for 4 to 15 panoramic radiographs. It's an interactive analysis for real time three dimensional assessment and measurements. Also, it reduces the defect of image artifact though it lacks the quality of soft tissue contrast. This poster summarizes the ability of CBCT to provide images in 3D with high level of detail, making it very accurate and precise method for dental applications.

EP-O139
Recent Advances In Local Anaesthesia

Shriya Mandal

Institute of Dental Sciences

Abstract
Although local anesthesia remains the backbone of pain control in dentistry, researches are going to seek new and better means of managing the pain. Objective: Most of the researches are focused on improvement in the area of anesthetic delivery devices and technique involved. Newer technologies have been developed that can assist the

dentist in providing enhanced pain relief with reduced injection pain and fewer adverse effects. It includes intraosseous anaesthsia, vibratactile devices, needleless local anaesthesia, safety dental syringes, computer controlled injecions, electronic dental anaesthesia. Purpose: This E-Poster will enlighten the practicing dentists regarding newer devices and methods of rendering pain control comparing these with the earlier used ones on the basis of research and clinical studies available.

EP-O140
Robotics in Oral and Maxillofacial Surgery

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Vishnu Dental College, Bhimavaram

Abstract
In Head and Neck surgery, minimally invasive approaches have been avoided because of concerns about visualization, possible damage to vital structures and the limited availability of effective instrumentation, but efforts to reduce the trauma of such operations have recently lead to the introduction of robot assisted surgery. Further, the head and neck surgical techniques have developed dramatically over the past few decades with a major focus on organ preservation surgery to reduce patient morbidity and improve the quality of life. The application of robotic technology in complex areas of head and neck provide surgeons with technologically advanced vision, enhanced dexterity, greater precision and ergonomic comfort reducing the mental and physical stress of the surgeons. If problems such as high cost and its application to only few surgical tasks are overcome, these robotic systems are expected to revolutionize the field of oral and maxillofacial surgery. In this posture, we present the robotic system and its applications in oral and maxillofacial surgery.

EP-O141
Nananotechnology in Oral and Maxilofacial Surgery

Khwairakpam Chaoton Singh

Farooqia Dental College and Hospital, Mysore, Karnataka, India

Abstract
Small ideas create big wonders, small things makes the world bigger. Nanotechnology is manipulation of matter on the molecular and atomic levels. Various avenues in the field of maxillofacial surgery are being aided with nanotechnology and the future holds great promise. Nanotechnology gives a wide range of applications ranging from its use in achieving pain control to bone regeneration. A colloidal suspension containing millions of active analgesic micrometer sized nanorobots can be instilled to achieve dental anesthesia. Self-aggregating monofibers called amphiphiles are used for nerve generation along with human nerve growth factor beta as demonstrated in animal studies. Nanophase hydroxyapetite a new biocompatible nanomaterial which mimicks bone has been shown to improve osteointegrative properties. 3D scaffolds of nanohydroxyapetite seeded with bone marrow show great promise for reconstruction of bony defects. The enhancement of bone formation at the bone-implant interface has been achieved through the modulation of osteoblasts adhesion and spreading, induced by structural modifications of the implant surface, particularly at the nanoscale level. The Oral Fluid NanoSensor Test technology is used for multiplex detection of salivary biomarkers for oral cancer enabling sensitive detection of cancer cells. Nanoscaled drug delivery systems, liposomes and drug-conjugated nanoparticles are being used in clinical trials for the treatment of cancer. The purpose of this poster is to look into the present aspects of Nanotechnology and current use in oral and maxillofacial surgery, and implications and challenges for the future.

EP-O142
Laser Assisted Lip-Repositioning Technique for Gummy Smile

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Abstract
Gummy smile, is a condition wherein there is an excessive display of maxillary gingiva (>3 mm) on smiling. Though some gummy smiles give an impression of a youthful smile, a gingival display of larger than 3 mm seems unattractive. The accurate diagnosis and determination of the aetiology associated with gummy smile is essential for the implementation of a right treatment modality. The aetiology for gummy smile can be due to soft tissue causes such as short upper lip, hyperactive upper lip or may be due to hard tissue causes such as dento alveolar extrusion, vertical maxillary excess or it could be due to a combination of all three entities. 10.5 % of the population could be affected by gummy smile, with a female predominance. This study undertakes to check the efficacy of the chair side lip repositioning technique using laser for correction of gummy smile under local anesthesia.A novel addition to the technique is proposed, a reversible trial accomplished just by applying sutures on the border of the future mucosal excision area, marked using diode laser, before starting the flap incision. Here we are presenting few cases with normal lip length and we have achieved good results post-surgery. This procedure is simple associated with low morbidity.

EP-O143
An Alternative To Skin Graft -The Collagen Membrane

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Abstract
Background
Oral and maxillofacial surgeons treat various pathologies in and around the oral cavity. The commonest protocol for all pathologies is the surgical excision. If the post operative wounds are left uncovered, they are prone to infection and scarring. There are many biological materials available to dress the open wound, which reduces the incidence of infection and degree of contraction. The biological material acts as a graft which may be either autogenous like skin graft or alloplastic like the collagen membrane.
Objective
After excision of the lesion, the wound is covered with collagen membrane Temporary cover for burns.
Materials
The collagen is a purified bovine serosa reconstituted collagen. Purified collagen refers to collagen that is free from other components

normally associated with it in its native state. This reconstituted collagen is cross linked with tanning agents such as gluteraldehyde or chromium sulphate so that its tensile strength is improved.

Conclusion

Collagen membrane obtained xenogenously does not fullfill all requirements of an ideal graft but is an alternative. Its application in the oral cavity is easy because of the simple chair side procedure and good tolerance of membranes by oral tissues

EP-O144
Bisphonate Related Osteoradionecrosis of The Jaw

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Abstract

The use of bisphosphonates is associated with the production of osteonecrosis of the jaws (ONJ). ONJ is defined as exposure of the bone of the jaws that does not heal within 8 weeks after dental procedure in a patient taking bisphosphonates. The condition may be asymptomatic or present with pain, soft-tissue swelling and loosening of teeth in addition to exposure of bone. Bisphosphonates are inhibitors of osteoclastic activity and their presence in the body may last for years. These drugs are used to prevent hypercalcaemia and to reduce bone loss in malignancy/pathological conditions involving bones (paget's disease and osteogenesis imperfecta). Concomitant steroid therapy may increase the risk in the latter group. It has been estimated that the percentage of patients receiving bisphosphonates for management of malignancy who develop ONJ is between 4 % and 10 %. Around 60 % of cases arise after tooth extraction or dento-alveolar surgery. The mandible is more susceptible than the maxilla. In summary, it appears that the most at-risk group are patients receiving intravenous bisphosphonates during the management of malignancy.

EP-O145
OPG as an Analytical Tool for Osteoporosis

Hiren Patel, Haren Pandya, Hitesh Dewan, Urvi Shah, Bijal Bhavsar, Enosh Steward

Faculty of Dental Science

Abstract

Osteoporosis is a global health issue that is common in both developed and developing countries. It is characterized by loss of bone density causing skeletal weakness, which is associated with high mortality in older adults. Since the older adult population is predicted to increase by more than twofold over the next 25 years, consideration of osteoporotic fractures is important for future health care planning. According to a recent model in Osteoporosis Risk-Assessment, the prevalence of osteoporosis was estimated to be 33.9 % among postmenopausal women aged 50 years or older. This might be due to lack of knowledge about osteoporotic diseases and patients sociodemographic characteristics. To diagnose osteoporosis, bone mineral density (BMD) measurement, a screening technique using dual energy x-ray absorptiometry (DXA), is considered the gold standard. The identification of low skeletal BMD from measurements of dental panoramic radiographs (DPRs) was developed as an inexpensive and quick alternative. Mandibular cortical width (MCW) measurement, in which a computer-aided diagnostic (CAD) system is used, was also developed to identify individuals at high risk of low skeletal BMD. Recently, using the assessment of eroded mandibular cortical bone, the mean MCW and its variance were measured to discriminate between low BMD and normal skeletal BMD in postmenopausal women.

EP-O146
Advanced Diagnostic Aid in Oral Cancer

Neha

Pb. Govt. Dental College and Hospital

Abstract

Oral cancers are one of the most common cancers worldwide today. They are usually neglected by the common population when compared to systemic cancers such as the lung cancer, colon cancer etc. It is a part of group of head and neck cancer which may arise as a primary lesion in any part of the oral cavity or oropharynx by metastasis from a distant site of origin. Oral cancer most commonly involves the tongue, floor of the mouth, buccal mucosa, gingiva and lips. In many Asian countries, especially India, chewing betel, paan and Areca are known to be risk factors for developing oral. Oral cancer may be extremely fatal if left untreated even at a very initial stage of the lesion. Early detection and treatment gives the best chance for its cure. The five-year survival rate of oral cancer still remains low and delayed diagnosis is suggested to be one of the major reasons. The detection and diagnosis are currently based on clinical examination, histopathological evaluation of the biopsy material and molecular methods. Several diagnostic aids have been developed over the years for early detection of oral cancer. This poster illustrates the advanced diagnostic aids for detecting oral cancer.

EP-O147
Role of CBCT in Oral and Maxillofacial Surgery

Sarita Mahajan

Pb. Govt. Dental College and Hospital, Amritsar

Abstract

Cone beam computed tomography also referred to as C-arm CT or flat panel CT is a medical imaging technique consisting of x-ray computed tomography where the x-rays are divergent, forming a cone. CBCT can scan the region of interest in up to a single 360Â° rotation in contrast to the multiple rotations required by Spiral CT. CBCT interrogates a much smaller volume of tissue, hence it has also been called micro-CT. Formerly, clinicians relied on clinical examination and conventional radiology to assess and diagnose lesions affecting the jaw bones. Conventional radiology generally reveals images that lack the sensitivity to display small changes in the bone and provides only a 2-dimensional (2-D) image, representing a superimposition of all structures within the 3-D volume of bone. The advantage of CBCT is its superior spatial resolution of structures with high-contrast mineralised tissue such as teeth and bone. CBCT, in addition to producing 3-D images, can produce 2-D images similar to the panoramic and cross- sectional reconstructions produced by Dentascan for preimplant assessment. This poster illustrates CBCT has

become increasingly important in treatment planning and diagnosis in oral and maxillofacial surgery.

EP-O148
Role of Diagnostic Ultrasound in Oral and Maxillofacial Surgery

Ankit M. Patel

College of Dental Sciences, Davangere

Abstract
Background
Various kinds of diseases may be found in the oral and maxillofacial regions and various modalities may be applied for their diagnosis, including intra-oral radiography, panoramic radiography, ultrasonography, computed tomography, magnetic resonance imaging, and nuclear medicine methods such as positron emission tomography. Of these modalities, ultrasound imaging is easy to use for the detection of non-invasive and soft tissue-related diseases.
Objective
An overview of the use of ultrasound for common head and neck conditions.
Methodology
Use of ultrasound was assessed in various fields of oral and maxillofacial surgery.
Results
Ultrasound was found to be very effective, easy, cheap and non-invasive diagnostic modality.
Conclusion
The clinical application of Ultrasonography in the oral and maxillofacial regions should be advocated compared to various other invasive procedures.

EP-O149
A Comparative Study of Wound Healing In Post Dental Extraction Socket With and Without A Chitosan Based Membrane

Abhishek Vamshi

Vishnu Dental College, Bhimavaram

Abstract
Purpose
To study the efficacy of a chitosan based membrane in controlling hemorrhage and healing of post dental extraction wounds.
Patients and Methods
All patients in an age group of 14 yrs to 38 yrs were taken in to the study after prior investigations and consent. All the patients underwent 2 or more extractions so that the sites were used as control and study groups in the same physiologic environment.
Results
All the chitosan based membrane treated sites achieved hemostasis in less than a minute with a mean value of 57.14 s and control group achieving hemostasis in 69.52 s. The healing appeared to be better when compared to that of control site by the end of 4th week review. Radiodensity achieved by the end of 12th week is much better when compared to that of control site with a mean density of 77.18 in test site and 71.18 on control sites.
Conclusion
Based on the clinical data and statistical evaluation we conclude that all the surgical sites treated with Chitosan membrane (HemCon Dental Dressing) Showed better results in all the parameters.

EP-O150
The Level of Training and Financial Standing of Oral and Maxillofacial Surgery Post Graduate Students in Bangalore

Girish Rao, Priyanka Belgal

D. A. P. M R V Dental College

Abstract
The job of a dentist today has surpassed taking care of one's teeth or oral health. Whether it is dealing with patients having cancer anywhere above the neck, correcting birth defects like cleft lip or dealing with traumatic injuries on the face, one specialist who is always needed on board is an oral and maxillofacial surgeon. But how confident is an oral and maxillofacial surgery postgraduate student in performing these? and though dentistry is one of the professions considered as the moneymaking professions yet oral and maxillofacial surgery post graduates struggle to have an income till an average age of 27. The survey consists of a questionnaire sent to 50 postgraduates in colleges of Bangalore divided in to 2 sections 1) Confidence in performing minor and major oral surgical procedures 2) Financial status during 3 years of their training. Does training need to be upgraded and improved so that postgraduates have a greater hands-on exposure during their training? Will they then be able to handle increasingly complex cases in a multi-specialty setup when they graduate? Can arrangements be made in order to get postgraduates to have some income during the training? Thus in the poster we would like to emphasize on. The Level of training and financial standing of Oral and Maxillofacial Surgery post graduate students in Bangalore.

EP-O151
Post Exposure Prophylaxis

Gaurav Shah, Vikram Sharma, Nishika Saraswat

NIMS Dental College, Nims University, Jaipur

Abstract
Percutaneous injuries in the dental offices and operation theatre are one of the main risk factors of the transmission of the diseases like HBV, HCV and HIV. These are important infectious disease that are to be focused-on in a dental and operative setting. Surgeons ranks first in the frequency of potential sources for acquiring viral hepatitis. It is necessary that all surgeons should aware of the post-exposure prophylaxis to be followed in case of exposure to HBV, HCV and HIV. Here by presenting a poster on awareness for the surgeons to protect themselves from HIV, HBV and HCV.

EP-O152
Botulinum Toxin:Broadening the Horizon in Oral and Maxillofacial Surgery

R. S. Bedi, Amartya Prakash Srivastava

Saraswati Dental College, Lucknow

Abstract
Botulinum toxin (BTX) is a bacterial toxin released from clostridium botulinum. BTX causes Botulism poisoning; a lethal condition in human and animals. Although it is a neurotoxic protein which can be used as a medicine. Many of us think of Botox primarily as a cosmetic drug to cure wrinkles and lines on facial region but actually it is also effective against TMJ disorders, neuropathic facial pain, facial nerve palsy hyperkinetic neuromuscular disorders. Botox is a protease that causes temporary clinical denervation of skeletal muscle by blocking Calcium ion mediated release of Acetyl choline and producing a transient dose dependant weakening of muscle activity and contraction is followed by sprouting of new axon terminal which results synaptic regeneration and re-established neuromuscular transmission. Clinical effects appear in 3–7 days after administration, followed by 1–2 weeks of maximum effect. NEURONOX (brand in India) contains 100 units botulinum toxin type A with some human albumin and sodium chloride. Since mechanism of action of BTX is specific, side effects are uncommon and systemic effects are rare such as flu like symptoms, muscle soreness are reported but for a short while.

EP-O153
Common Antibiotics Prescribed by Dentists in Bangalore

Girish Rao, Roopa Ganta

DAPM RV Dental College

Abstract
Background
Antibiotics are prescribed by dental surgeons for treatment of oral and odontogenic infections as well as in prophylaxis for systemic conditions like infective endocarditis, to prevent postoperative local complications. The indications of systemic antibiotics is limited in common dental practice as most of dental diseases are treated by operative intervention like extraction, root canal treatment, flap surgery, pre-prosthetic surgery and other minor surgical procedures.
Objective
The aim of this survey was to highlight the common antibiotic prescribing practices by general dental practitioners.
Methodology
This survey consisted of a questionnaire which was sent to 50 private dental practitioners (including BDS and MDS graduates of different specialties) in Bangalore. The questionnaire consisted of 1) Antibiotics prescribed after dental extractions. 2) Antibiotics prescribed for per-apical abscess, periodontal abscess, Root canal treatment (RCT), Cellulites and minor surgical procedures in general dental practice.
Results
This study showed that there is a discrepancy in the prescribing practices of general dentists.
Conclusion
Hence we suggest that there should be a protocol in place which acts as a guideline for dental surgeons while prescribing antibiotics.

EP-O154
Use of Atomised Dexmedetomidine Intranasally for Sedation in Minor Oral Surgical Procedures

Sadaf Syed

Saraswati Dental College

Abstract
The purpose of the study was to evaluate the efficacy of dexmedetomidine in an atomized form via intra nasal route for conscious sedation in various minor oral surgical procedures.
Patient & Methods
In this double blind study patients requiring minor oral surgery were selected for intra nasal sedation with dexmedetomidine. Dexmedetomidine 1 microgram/kg body weight was used with 0.9 % normal saline to make 1.5 ml of solution. The drug was administered intranasally with the help of 3 ml syringe with an atomizer device 30 min prior procedure. Assessment of sedation level was measured with a modified OAA/S scale at regular 10 min interval along with vital data monitoring.
Observation
It was observed that sedation value peaked at 40–50 min and returned to normal at 4 h and according to scale it produced satisfactory level of sedation. Severe adverse reactions were not observed except bradycardia which was self-limiting and did not require treatment.
Conclusion
Dexmedetomidine was found to be relatively safe, rapidly and efficiently absorbed producing satisfactory level of sedation required in minor oral surgical procedures.

EP-O155
Adjunctive Facial Esthetic Procedures

Muni Madhav Sharma

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Abstract
Cosmetic patients are looking for a more youthful appearance without spending a lot of money, feeling any pain, or experiencing any postprocedure downtime. There has been a significant paradigm shift in cosmetic facial surgery and it is a minimally invasive procedure (MIP). MIPs interface with all aspects of ages of cosmetic patients. Younger patients benefit solely from MIPs, middle-aged may stave off surgery for a number of years with MIPs and older patients can amplify surgical results with MIPs. Neurotoxins and fillers, for instance are very predictable and efficient. The use of Botox for the treatment of hyperkinetic facial lines and furrows is another effective primary, adjunctive, or prophylactic therapy to offer cosmetic patients in the spectrum of treatment options for full facial rejuvenation. New cosmeceutical therapies can be used adjuvant to chemical peels, lasers, and injectables, making antiaging regimens less painful and

requiring less postprocedural healing time. The adage if it sounds too good to be true, it probably is must always be kept in mind with MIPs. In general, you get what you pay for, in terms of recovery. Many procedures that promise maximal effects with minimal recovery are often disappointing.

EP-O156
Electronic Dental Anesthesia: No More Needles!!!

Jeevanlata, Rajesh Prasad

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Abstract

Introduction

Although local anesthesia remains the backbone of pain control in dentistry, research has continued, in both medicine and dentistry, to seek new and better means of managing pain associated with many surgical treatments. Because of distressing effect caused by needle delivery of local anesthetics, the use of alternative techniques of pain control has been of interest in dentistry. One such alternative technique is electronic dental anesthesia (EDA).

Abstract

The use of electricity as a therapeutic modality in medicine and dentistry is not new. The first recorded report of electrotherapy dates from 46 AD. The use of transcutaneous electrical nerve stimulation (TENS) and its dental progeny, EDA, has developed since the mid-1960s into techniques that have considerable utility in the management of pain. Conclusion: Most of the manufacturers of EDA units have ceased marketing to dentistry because of the lack of interest in this technique among most dentists. However the use of TENS in management of chronic pain, specifically TMJ/MPDS, has continued to increase. EDA is a viable, preferred alternative to local anesthesia in many operative and periodontal procedures and even when it fails, electronic anesthesia still allows one to administer local anesthesia without pain.

EP-O157
Allografts in Oral and Maxillofacial Surgery

Munish Kumar, Ravi narula, Amritveer Kaur

Guru Nanak Dev Dental College, Sunam

Abstract

The use of bone grafts has brought about a remarkable improvement in managing osseous deficits. The gold standard for bone grafting is autogenous bone, from extra or intra-oral donor sites. They do not cause any immunological reaction and have optimal biocompatible remodeling patterns however considerable morbidity from donor site associated with pain and haematoma, risk of paresthesia and infection and deficiencies in the quality and quantity of available bone has led to increased use of allogeneic bone. Allograft bone is generally supplied in three different forms Deep-frozen, Freeze-dried and Demineralised. It has various applications in the primary management of midfacial fractures, midfacial osteotomies, to augment the contour of the facial skeleton, to reduce the dimensional ridge changes that occur during post extraction healing. In Implantology allografts can be used in sinus floor grafting, alveolar process augmentation, for filling of defects in the outer table of the compact bone formed following inflammatory conditions or destroyed during a traumatic extraction. This presentation discusses the various uses of allografts in oral and maxillofacial surgery

EP-O158
Role of Ultrasonography Versus Radiography in Maxillofacial Diseases

Hemant Gupta, Deepak Kumar, Karn Singh

Babu Banarasi Das College of Dental Sciences, Lucknow

Abstract

Ultrasonography as an imaging modality in dentistry has been extensively explored in recent years due to several advantages that diagnostic ultrasound provides. It is a non-invasive, inexpensive, painless method and unlike X-ray, it does not cause harmful ionizing radiation. Ultrasound has a promising future as a diagnostic imaging tool in oral and maxillofacial surgery. It has been used in a diagnosis of a variety of maxillofacial diseases and disorders like oral and maxillofacial pathologies, TMJ disorders, Dental implants, Trauma, Maxillofacial infections, etc. The advantages of using Ultrasonography as a diagnostic modality are that it is a non-ionising, non-invasive method, painless, accurate, and has good acceptance by patients, which makes it interesting and readily acceptable by maxillofacial surgeon for a proper diagnosis. The poster provides an overview of the most recent advances of ultrasound imaging in maxillofacial surgery.

EP-O159
Oral and maxillofacial Surgeons..... Future of India

Reena, Shishir Mohan, Arti

K.D Dental College

Abstract

India is highly populated developing country.as with other scientific discipline, the field of dentistry is rapidly growing.our international counterparts know very little about our field especially oral and maxillofacial surgeons.the poster is aimed to introduce the scope, brief about history and discuss the future of same.it will help our international colleagues to have better insight of history, development, training and trends prevelant and prospective India is highly populated developing country.as with other scientific discipline, the field of dentistry is rapidly growing.our international counterparts know very little about our field especially oral and maxillofacial surgeons.the poster is aimed to introduce the scope, brief about history and discuss the future of same.it will help our international colleagues to have better insight of history, development, training and trends prevelant and prospective future. oral surgery has emerge d as a specialised branch of dentistry over the course of time and HSS opened new option in fields of surgery beyond basic dentistry.as an OMFS can move out of oral cavity and explore the fields of oncology, plastic surgery, craniofacial surgeries, much more.....

EP-O160
Comparative Evaluation of Rate of Bone Formation by Rhbmp-7 in Small Maxillary and Mandibular Bony Defects

Divya Mehrotra, Shadab Mohammad, Hari Ram, Geeta Singh, Vaibhav Anand

King Georges Medical University

Abstract

Background

BMPs are the most potent growth factors known and have been studied extensively in animals and in humans for the bone regeneration in the maxillofacial region. To date 20 members of the BMP family have been identified which will all, except BMP 1 belong to TGF-beta super family.

Objective

Evaluation of effects of BMP-7 in bone healing in the Indian Population.

Methodology

Study includes 20 patients with maxillofacial bone defects (periapical pathology) with size of defect from 1 to 2 cm attending OPD, Deptt of Oral & Maxillofacial Surgery, King George's Medical University Lucknow. Apicoectomy along with placement of collagen Sponge (control) OR collagen sponge with BMP-7 (cases) in the bony defect, is done. All patients have been randomized into: Group I: 10 PATIENTS Only Collagen Sponge Group II: 10 PATIENTS BMP 7 with Collagen Sponge.

Results

Radiographic (percentage bone fill) Total number of small squares of graph paper covering the defect (preoperative) = A Total number of small squares covering the defect (postoperative follow op) = B Percentage bone fill = A-B/A * 100 difference in mean percentage bone fill between group I and groupII was at 2 weeks −4.8 % 4 weeks −6.2 % 24 weeks 3.6 % Conclusion Patients in which BMP-7 was used, had better bone healing.

EP-O161
Lasers in Oral Surgery

Dimple Rani M Bangera

A J Institute of Dental Sciences, Mangalore

Abstract

The indications of lasers in oral surgery are defined by the laser-tissue interaction types. These are mainly thermal effects depending especially on the absorption of laser light in varying biological tissues. In histological sections different laser effects are demonstrated on oral mucosa, bone and cartilage, which have a great influence on wound healing and subsequently on clinical indications of the different wavelengths. On the one hand the good coagulation effect of the Nd:YAG laser is wanted for hemostasis in soft tissue surgery. On the other hand, for the treatment of precancerous dysplasia or neoplasia an effective cutting with a coagulation effect like using the CO2 laser is necessary. However, the excision of benign mucosal lesions as well as performing osteotomies or shaping of cartilage should be undertaken with the Er:YAG laser without greater coagulation and consequently without any delay of wound healing.

EP-O162
Atrophic Maxillae-Treatment Options with Minimal Invasion and Complications

Rohit Yadav, Vishal Mittal

Abstract

Patients with moderate to severe atrophy challenge the dental surgeon to discover alternative ways to use existing bone/resort to augment the patients with autogenous/ alloplastic bone materials. Many procedures have been suggested for these atrophied maxilla before implant placement, which include Lefort I maxillary down fracture, onlay bone grafts etc which require maximum surgical intervention and there are chances of failure due to bone graft material. These advanced surgical implant placement procedures which includes placing zygomatic, pterygoid or basal implants and conventional implants with sinus lift procedures are useful in prosthetic rehabilitation of the severly resorbed maxilla regardless of whether it is totally or partially edentulous and with minimal bone present. Therefore, with proper case selection, correct indication, and knowledge of the surgical technique, the use of zygomatic implants associated with standard implants offers advantages in the rehabilitation of severely resorbed maxillae, especially in areas with inadequate bone quality and volume, without needing an additional bone grafting surgery, thereby shortening or avoiding hospital stay and reducing surgical morbidity.

EP-O163
Cone Beam Computed Tomography—Applications in Oral & Maxillofacial Surgery

Joji Peter

AJ Institute of Dental Sciences, Mangalore

Abstract

The utility of cone beam computed tomography (CBCT) images in oral and maxillofacial surgery has seen continuous increase. The advantages and limitations of CBCT images are the diagnosis and surgical planning of dentoalveolar procedures, odontogenic cysts, benign and malignant tumours, inflammatory changes, orthognathic surgery, maxillofacial trauma, sinus disorders, and systemic and osseous conditions that manifest in the maxillofacial area.

EP-O164
Articaine: the wonder anaesthesia?!

Boricha Vishalkumar G

A. J. Institute of Dental Sciences, Mangalore

Abstract

The management of postoperative pain and inflammation is a critical component of patient care. The improvements in agents and techniques for local anaesthesia are probably the most important advances in dental science to have occurred in the past years. The palatal injection is well recognized as the most painful of all injections in the oral cavity because of the tight binding of the palatal mucosa to its underlying periosteum and its abundant nervous supply. Although a

number of adjunctive techniques have been described to reduce the discomfort of palatal injection, they have not gained universal acceptance. It has been claimed that articaine is able to diffuse through soft and hard tissues more reliably than other local anaesthetics and that maxillary buccal infiltration of articaine provides palatal soft tissue anaesthesia. Few previous studies have successfully evaluated articaine local anaesthetic in tooth removal only with buccal anaesthesia, without complementary palatal injection. In a given clinical scenario, with many local anaesthetics agent currently available it is often difficult for the clinicians to decide which anaesthetic agent would be most efficacious. The better understanding of the local anaesthetic agents will make the choice easier for the clinicians.

EP-O165
A Comprative Evaluation of Clinical Efficacy of Amniotic Graft and Collagen Membrane in Mandibular Vestibuloplasty

Thousif Ahmed

Abstract
Grafts are used in vestibuloplasty procedure to avoid relapse due to secondary wound contractureas seen with secondary epithelization technique. Conventional methods like free mucosal grafts and split thickness grafts require creation of second surgical wounds for use as a donor site. Amniotic graft and Collagen membrane are biological skin substitutes which are natural, easily available, nonimmunogenic, nonpyrogenic, ready to use with the excellent tissue compatibility. Amniotic grafts and commercially available collagen sheets are used in the treatment of burns, ulcers, diabetic ulcers, bed sores etc., as a biological dressing material.30 edentulous patients who required vestibular extension procedure were included in this study, out of which 15 were divided into amniotic group and 15 were divided into collagen group. Clark's secondary epithelization vestibuloplasty technique was followed in the study and theexposed periosteum was covered by amniotic membrane and collagen sheet and stabilized with the help of surgical splint.

EP-O166
Advances of Local Anesthetic Technique in Dentistry

Arti Butoliya

Rajasthan Dental; College and Hospital Jaipur

Abstract
Local anesthetics are the safest drugs used in dentistry for pain management but cause undesirable qualities such as stinging and burning upon injection, relatively slow onset of action and unreliable or no anesthesia when injected into infected tisues. Although local anaesthesia remains the backbone of pain control in dentistry, researches are going to seek new and better means of managing the pain. Most of the researches are focused on the improvement in the area of anaesthetic agents, delivery devices and technique involved. Newer technologies have been developed which have made buffering of local anaesthetics practical for use to alkanize dental local anesthetic cartridges making the anaesthesias onset quicker, reliable and more comfortable for the patient all of which can assist the dentist in providing advanced pain relief with reduced injection pain and fewer adverse effects. This poster deals with newer devices and methods of rendering pain control comparing these with earlier used ones.

EP-O167
Cryosurgery

S. Gokkula Krishnan, Amrita Patnaik

Gitam Dental College and Hospital

Abstract
Cryosurgery dates back to the 19th century, with the description of the benefits of local application of cooling for conditions such as pain control. Once commercial liquefied gases became available, more progress was made in the use of cryotherapy for localized lesions. As understanding of disease response to freezing increased, safer techniques for performing freezing procedures helped prepare its clinical application in different clinical situations, such as prostate disease and bronchial cancers. Cryosurgical techniques are less invasive and have lower morbidity compared with surgical resection. However, the use of cryosurgery has been limited by a lack of good understanding of the underlying mechanisms of tissue destruction. To apply cryosurgery clinically, and to extend its use, it is important to understand the mechanisms of freeze injury on cells, and to control the thermal parameters.

EP-O168
Cross Infections to Oral & Maxillofacial Surgeon

Amrita Patnaik

B. R. S Dental College & Hospital

Abstract
Cross infection is the transfer of harmful micro organism, bacteria & virus from one host (patient) to others (clinician). Cross infection is caused by unsterilized medical equipment, air water spray from hand pieces, bacteria from coughing & sneezing (aerosols), touching contaminated objects. Oral & maxillofacial surgeon comes in contact with blood, saliva, body fluids which increase the risk of cross infection from infected individual. These infection can cause serious complications like hepatitis, AIDS, herpes simplex (whitlow) etc. We should work diligently to ensure equipment safety & clean environment. Hence our primary objective should be prevention of infections by pursuance of strict aseptic protocols for the patient as well operatory preparation.

EP-O169
Use of CBCT in Oral &Maxillofacial Surgery

Arka Kanti Dey

Kalinga Institute of Dental Sciences, Bhubaneswar

Abstract
CBCT or Cone –beam Computed Tomography also known as 'C-arm CT', is a revolution in the field of Diagnosis & Radiology. It is a variation of traditional Computed Tomography (CT) System, in

which data are used to reconstruct a 3D image dental segment, Oral & Maxillofacial region like mouth, head and neck etc., using a cone shaped X-ray beam. This technology is of prime importance, and is gradually gaining its space in daily practice in field of Oral &Maxillofacial Surgery. It is of greater use in clinical applications, including dental implant planning, cleft palate assessment, face & jaw pathology diagnosis, temporomandibular joint disorders, orthognathic surgery, impacted teeth, detecting foreign bodies in maxillofacial region & diagnosis of facial trauma etc.

EP-O170
Intra-Operative Identification of Facial Nerve

Abhishek PT

Abstract
Facial nerve, the 7th cranial nerve is the nerve of facial expression. Any injury to the facial nerve during any surgical intervention will lead to gross functional as well as cosmetic deformity. Although there are several ways to develop access to the CN VII, the popular being the ante grade approach with the identification of the main trunk first. It has been reported in literature that during parotid surgeries 10–30 % of the superficial parotidectomies temporary paralysis occurs and permanent paralysis in less than 1 % of cases. The pathways of the facial nerve are variable and a sound knowledge of the intra-temporal and extra-temporal anatomy is needed for the accurate identification, safe and effective surgical intervention in the head and neck surgeries. In this poster I will be discussing about the intra-operative identification of the facial nerve with the help of supporting intra-operative clinical photographs of two parotid surgeries done in our department.

EP-O171
Stem cell research and tissue engineering in dentistry

Mudit Sharma

Rajasthan Dental College and Hospital

Abstract
Stem cell is an undifferentiated cell of a multicellular organism which is capable of giving rise to indefinitely more cells of the same type, and from which certain other kinds of cell arise by differentiation. Tissue engineering is based on harvesting the stem cells, expanding and differentiating them into cells which has the potential to form new tissue or organ. The harvested cells are then seeded on to scaffolds that are manufactured in laboratory to resemble the structure of desired tissue of organ to be replaced. Much of the current tissue engineering research is directed toward the areas of cell manipulation and scaffold design. The most studied stem cells are those of the hematopoietic and mesenchymal lineages. Dental follicle stem cells could be a cell source for mesenchymal stem cells. Dental follicle is present in impacted teeth, commonly extracted and disposed of as medical waste in dentistry. Dental follicle stem cells can be isolated and grown under defined tissue culture conditions, and recent characterization of these stem cells has increased their potential for use in tissue engineering applications, including periodontal and bone regeneration. My poster denotes presentation on Stem cells research and tissue engineering usage in dentistry.

EP-O172
Comparative Evaluation of Platelet Count Using Platelet Rich Plasma

Lalremruati

Abstract
As the wound healing cascade requires multiple growth factors for different stimulatory and inhibitory functions at different phases, within the different period of wound healing cascade, emerging technologies have developed leading to the current use of PRP (Platelet rich plasma). PRP is obtained from autologous blood by sequestering and concentrating platelets by gradient density centrifugation. We have planned a short study to compare the platelet count from PRP obtained using three different anticoagulants. 15 ml of blood sample will be drawn from healthy donor and divided into three parts in three different test tubes. In each test tube, three different anticoagulant will be added i.e., EDTA (Ethylenediamine tetraacetic acid), CPD (Citrate phosphate dextrose) and ACD (Acid citrate dextrose) in the ratio of 1:10. First centrifugation will be done at 2400 rpm for 10 min followed by concentric spin of 3600 rpm for 15 min. Using an auto-analyser, the platelet count was done in each PRP sample obtained and compared for the difference in the platelet count.

EP-O173
Closure of Oro-Antral Fistula by Buccal Fat Pad

Archit

Abstract
So many causes can lead to fistulas which can involve the nasal and antral cavities or even both. They may result from various entities such as pathological ones or secondary to removal of tumors or maxillary cysts. However, the main cause of oroantral fistula is the extraction of a maxillary molar or premolar. This is due to the close relationship between the apex of these teeth and the thinness of the antral floor. The aim of this poster is to report and describe the procedure used to close a late oroantral fistula using the pedicled buccal fat pad graft. patient, in good general health, was referred for the closure of a late oroantral communication. Upon clinical examination, a fistula was observed connecting the oral cavity to the maxillary sinus. A surgical procedure was performed under local anesthesia in order to close the oroantral fistula with a buccal fat pad graft. The healing of the wound and closure of the defect was seen after 15-day postoperative period, with a complete epithelialization. The patient presented a complete healing of the fistula, with no complications one year post-operative follow-up. Grafting of the pedicled buccal fat pad is highly considered as an efficient, safe and alternative closure solution in case of a large oroantral fistula. Pedicled buccal fat pad grafting corrected the defect without generating any sequelae and/or risky postoperative discomfort to the patient.

EP-O174
Niti

Scar Revision Techniques

Abstract
Scar revision techniques scar is an end result of the local response of the skin (wound healing) to any traumatic, surgical or inflammatory injury. It may be atrophic or hypertrophic. If the scar is hyper pigmented it adds to the unsightliness and makes it more unacceptable. The ideal scar is a nearly imperceptible fine line that is level with the skin and blends with the relaxed skin tension lines (rstls). Scar appearance can vary greatly due to surgical technique, final orientation of the scar, shape of the scar and its location on the body. Scars can be cosmetically, psychologically and socially disturbing particularly the scars over the face and other exposed parts. No scar can ever be made to vanish completely, but can only be modified to make it cosmetically and aesthetically more acceptable by using various treatments / procedures. In my poster, i would like to depict the various modalities available for scar revision with special consideration to facial scars such as: medical management: medications topical steroids, retinoic acid, colchicines, hydrogen peroxide, hormones, topical and oral retinoids etc surgical management: scar excision and resuturing zplasty wplasty subcision scar excision and cover vy plasty dermal grafting laser treatment other less invasive techniques intralesional injections dermabrasion intralesional cryotherapy microneedling chemical peels tcacross technique dermal fillers platelet rich plasma/autologous blood camouflage therapy tattoo use of cosmetics.

EP-O175
Dish Syndrome

Ashish Sadana

Swami Devi Dyal Hospital and Dental College

Abstract
Diffuse idiopathic skeletal hyperostosis is considered a form of degenerative arthritis. Characterised by unique, flowing calcification along the sides of the contiguous vertebrae of spine, also is associated with inflammation and calcification of tendons st their attachment points to bone. This leads to formayion of bone spurs, which on movement if compressed leads to sudden pain amd dysphagia in patients. This disease have very less number of cases so can be misconcepted with patients of tonsillitis. My poster highlights the complete information of DISH syndrome amd its management in detail.

EP-O176
Is It An La Solution Or Something Else-Think Twicw Before Injecting!

Rajib Chakrabarty,

Abstract
Formalin is used in dentistry as a disinfectant, antiseptic and tissue preservative; which is a 35- 40 % standard aqueous solution of formaldehyde. It is a toxic substance, which mainly affects respiratory tract, gastrointestinal tract, and the skin. There are various forms of formalin toxicity, like exposure to formalin vapors, skin contact, accidental ingestion or injection of formalin. Chemical facial cellulitis, while commonly seen in domestic accidents or attempted suicide, is uncommon in the dental office. Here presenting an unusual case of chemical facial, in particular periorbital, cellulitis caused by inadvertent injection of formalin, which was mistaken for local anesthetic solution into the soft tissue of the mid face region, comprising the immediate symptoms, possible etiology, and management of the difficult situation. Guidelines to avoid such unfortunate events also outlined.

EP-O177
Cryosurgery In Oral Lesions

Shailesh Kumar College

Abstract
Cryosurgery is a therapeutic method that uses freezing to obtain a tissular inflammatory and/or destructive response in tissue. The devitalized tissue slough is absorbed, depending on location in the body. Cryosurgery requires the use of refrigerating apparatus and a cryogenic agent like nitrous oxide, liquid nitrogen, carbon dioxide etc. The method used for treatment by us is with application of nitrous oxide as a cryogen from a high pressure cryoprobe. It has been used in treatment of various oral lesions. Our experience has shown that cryosurgery is a safe & relatively inexpensive method for treating various oral lesions. The oral mucosa, because of its humidity and smoothness is an ideal site for this technique. Cryosurgery has been established as non surgical method characterized by its application, therapeutic effectiveness, painless during the procedure and low incidence of secondary infection and hemorrhage. This poster will present the simple easy and sufficiently effective cryosurgical treatment of various oral lesions by direct application of nitrous oxide using cryoprobe.

EP-O178
Nanotechnology in Oral and Maxillofacial Surgery

Navjot Kaur, Tejinder Kaur, Sarika Kapila

S. G. R. D Dental and Research Institute

Abstract
Nanotechnology is the science of manipulating matter, measured in the billionths of meters or nanometer, roughly the size of two or three atoms. Nanoparticles have a high surface area: volume ratio that confers mechanical, magnetic, optical, and chemical properties that are superior to those of the original materials. The concept of nanotechnology was first introduced by the quantum theorist and Nobel laureate Richard Feynman in 1959. In oral and maxillofacial surgical practice nanotechnology has influenced the development of tissue engineering, imaging, delivery of drugs, and has improved implants. Nanomaterials can be used to reconstruct bone. Derivatives of polyhydroxyacids, such as polylactide (PLA), polyglycolide (PGA), poly (Llacticacid) (PLLA) are used for this purpose. Nanoparticles can also be used in imaging techniques. Fluorescent semiconductor nanocrystals (QD) have narrow emission spectra that span from ultraviolet to nearinfrared. This, together with their prolonged photostability and good photoluminescence make them particularly suitable for noninvasive imaging. QD can also be used in the biopsy of sentinel lymph nodes. Nanotechnology also finds its role in the

delivery of drugs. Liposomes and drugconjugated nanoparticles for the treatment of cancer are of particular interest. This poster aims to present the current use and future implications of regenerative nanotechnology in oral and maxillofacial surgery.

EP-O179
Osteomark Surgical Navigation System For Oral and Maxillofacial Surgery

S. G. R. D Dental and Research Institute

Kirandeep Kaur, Sumeet Sandhu, Ramandeep Singh Bhullar

Abstract
Surgical navigation is a powerful tool that has the potential to transfer a surgical plan accurately. Four different technologies can be used for intraoperative tracking of instruments and for displaying them on a computer screen relative to the patient's images: optical, electromagnetic, electromechanical and ultrasonographic. Osteomark uses electromagnetic technology that does not require the user to maintain a line of sight between the instrument and a camera. This poster will focus use of osteomark as a navigation tool, its applications in craniomaxillofacial surgery, and advantages over other systems.

EP-O180
Endoscopic Techniques in Oral and Maxillofacial Surgery

S. G. R. D Dental and Research Institute

Harpreet Singh, Jasmine Kaur, Yashmeet Kaur

Abstract
The oral and maxillofacial surgeons are finding advantages and new applications for endoscopically assisted maxillofacial surgical procedures. The endoscope has been describes as an " extra set of eyes " and is the basis of for innovation across multiple disciplines and the fabrication of a new class of instruments and surgical techniques. Decreased complication rates, comparable success rates, diverse functionality make the endoscope a helpful instrument in a surgeon's armamentarium. This poster will focus on present use of endoscopic techniques for the treatment of craniomaxillofacial trauma, orthognathic deformities, obstructive salivary gland disease, maxillary sinus disorders, trigeminal nerve injury and temporomandibular joint (TMJ) disorders.

EP-O181
Condylar Sag: An Occlussal Discrepency

S. G. R. D Dental and Research Institute

Amreen Kaur, Sumeet Sandhu

Abstract
Condylar sag can be defined as an immediate or late change in position of the condyle in the glenoid fossa after surgical establishment of a preplanned occlusion and rigid fixation of the bone fragments, leading to a change in the occlusion. Condylar sag can be central or peripheral. Though it is most challenging to diagnose and treat correctly as it produces repeatable patterns of malocclusion after removal of the IMF, which can be used to diagnose the condition and identify the offending condyle. The surgeon needs to understand the mechanisms of occurrence of condylar sag and the specific patterns of malocclusion that it may produce. This will enable him to make a diagnosis and to implement the appropriate preventive and corrective measures, providing the opportunity for immediate correction of the condylar position, and thereby obviating the need for a second operation or orthodontic compromise. While we do not have radiographic confirmation of the condylar position, it is reasonable to associate occlusal stability with correct condylar placement. As condylar sag is blamed for relapse, the surgeon may "posteriorise" the condyle, depending on the direction and magnitude of the force needed to induce pathological changes. This presentation attempts to elucidate this phenomenon with the view to put it in the right perspective for implementing preventive and corrective measures.

EP-O182
Comparative Evaluation of Relationship of Maxillary Molar Teeth with the Maxillary Sinus Using Panoramic Radiograph on Different Cephalic Indices

Ammara Tahmeen

Navodaya Dental College Raichur

Abstract
Maxillary molars and premolar teeth and their roots are remarkable structures due to their close vicinity to the maxillary sinus. Contamination of maxillary air sinus renders highly morbid infections as well as oroantral fistulae or root displacement caused by molar teeth extraction and implantation. Better knowledge of the distance between molar teeth root apices and maxillary sinus greatly influences conduction of surgical procedures on the upper molar and premolar teeth. We are conducting a short study on 60 patients to compare the relationships and distance between maxillary root tips and the maxillary sinus floor. The distance between the maxillary molar teeth and the maxillary sinus will be evaluated on the oral panoramic radiographs on brachycephalic, dolicocephalic in comparison to mesencephalic individuals.

EP-O183
Facial Nerve Rehabilitation

Gurpreet Singh, Yashmeet Kaur

S. G. R.D Dental and Research Institute

Abstract
The integrity of facial nerve is endangered in road traffic accident, physical assault and gunshot injuries. At times injury to facial nerve is inevitable because of malignant perineural involvement or at risk during surgical procedures such as: parotidectomy, rhytidectomy, surgical approaches to TMJ, condylar fracture reduction etc. Preservation of facial nerve &its functions is of prime concern to a

maxillofacial surgeon. Facial nerve regeneration following injury can vary and may result in hypofunction (persistent weakness or poor excursion of facial muscles), hyperfunction (hypertonicity, spasm), or aberrant regeneration (synkinesis). Once a facial nerve discontinuity is encountered, the first approach is to attempt to reestablish direct neural continuity between the facial motor nucleus and the distal facial nerve either by primary repair or by auto graft techniques, if not possible, reanimation is considered. Facial reanimation procedures refer to interventions that restore facial symmetry, resting tone, voluntary movement, or a combination of these. The present poster presents the different surgical techniques of facial reanimation.

EP-O184
Newer Alloplastic Materials in Oral and Maxillofacial Reconstructive Procedure

Vimal Joseph Devadoss

Rajas Dental College and Hospital

Abstract
Today, significant differences in the use of biomaterials (membranes and grafts) of animal or synthetic origin have yet to be reported. Nevertheless, some evidences suggest that synthetic materials have a lower risk of disease transmission. This review aims to assess the available information's on regenerative bone technique using reasorbable membranes and bone grafts. In particular, biocompatibility, immunological response, tissue reaction, reabsorption time and histological features of materials daily use in dentistry and in maxillofacial surgery were emphasized. Alloplastic implants, especially those made with calcium phosphate ceramics, are being increasingly used in reconstructive surgery. Despite attractive generic features such as good biocompatibility, these ceramic implants differ significantly from each other in terms of biologic profile.

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