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ORAL PRESENTATIONS







OP-002 Peroperative and Postoperative Complications in Sagittal Split Ramus Osteotomy

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Orthognathic surgery is a preferred surgical procedure for correcting dentofacial anomalies, which is widely used today. Orthognathic surgery treatment process is a multidisciplinary approach and many experts manage this process in cooperation. Orthognathic surgery includes various preoperative, peroperative and postoperative complications. Preparing for orthognathic surgery and proper management of the operation aim to minimize possible complications. Many osteotomy techniques used in orthognathic surgery have been described from past to present. In this presentation, complications seen in sagittal split ramus osteotomy used in the mandible are discussed. When the causes of complications that may occur in different processes are understood and treated correctly, they can be managed without causing serious problems and the surgery is successful. The aim of this study is to explain the intraoperative and postoperative complications encountered in sagittal split ostotomy, which are operated in Istanbul University of Health Sciences, Hamidiye Faculty of Dentistry, Department of Oral and Maxillofacial Surgery, and evaluate the possible causes, management of procedure and treatment choices as a case series preasentation and review of literature.

Keywords: Bad Split, Orthognathic Surgery Complications, Sagittal Split Ramus Osteotomy



OP-003 The Effect of Levan Hydrogel on Osteogenesis in Guided Bone Regeneration

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Objective: This research aims to investigate the effect of levan on bone formation when used in combination with bone grafts in guided bone regeneration.

Materials-Methods: In our study, eight New Zealand White Rabbits were used. Four 8 mm diameter circular defects were created in the calvaria and Bio-Oss®/Levan was applied to the defects at different rates. Sacrification was performed at the end of the eight-week follow-up period. The primary outcome measure was new bone formation. Secondary outcome measures were; defect closure rate, trabecular bone thickness, bone surface area; fibrous tissue, vascularization, bleeding, inflammation, osteoblast density, and residual graft amount. Graphpad 8.3.0 was used to analyze the data, and Shapiro Wilk's test was used while testing the normality of the data distribution. Parametric or non-parametric tests were used according to the distribution of variables.

Results: Two rabbits died on the first postoperative day. In the examinations performed with twenty-four defects in six rabbits, no significant difference was found between the groups in terms of radiological new bone formation, defect closure rate, trabecular bone thickness, and bone surface area (p>0.05). Histologically, while there was a significant difference between the groups in new bone formation, vascularization, and osteoblast density (p<0.05), no significant difference was observed in other parameters (p>0.05).

Conclusion: Similar healing and tissue compatibility despite the reduction of Bio-Oss® amount indicates that levan may be an important biomaterial that can reduce the amount of bone graft needed in guided bone regeneration.

Keywords: Guided bone regeneration, levan, new zealand rabbits





OP-004

Resonance Frequency Analysis, Histomorphometric and Immunohistochemical Analysis of The Effect of Systemic SSRI Use on Dental Implant Osseointegration: Experimental Study in Rabbit Tibias

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Objective: The negative effect of systemic SSRI use on bone healing has been investigated in recent years. The aim of our study is to investigate the effect of SSRI use on osseointegration in a rabbit model with dental implants.

Materials-Methods: Sixteen dental implants, one on each tibia of eight New Zealand male rabbits, were applied. SSRI was given orally to four rabbits, the experimental group, for eight weeks. At the end of eight weeks, resonance frequency analysis was performed with the help of Osstel device in all subjects. Tibia samples obtained after the subjects were sacrificed were subjected to immunohistochemical and histomorphometric examination.

Results: Although there was no statistically significant result between the two groups as a result of resonance frequency analysis, histological and immunohistochemical examinations, osseointegration was observed to be weaker in the group using SSRI in terms of numerical data.

Conclusion: The use of SSRIs has been investigated for years for its adverse effects on bone healing. According to the idea we got from the study, it is an idea that should be supported by in vivo and in vitro studies.

Keywords: SSRI, Dental Implants, Osseoentegration







OP-005

Comparing the longevity of activated plasma albumin gel and hyaluronic acid for facial volumization

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Objective: Hyaluronic acid has been used for skin rejuvenation objectives; however, its exougenous nature and rapid removal from the skin caused other materials to be considered as its alternatives. Adding clotting cascade agents or thermal treatment of platelet poor plasma (PPP) forms plasma gel solution with higher viscosity or resistance as having fibrin in its composition. This study comapred the longevity of activated plasma albumin gel and hyaluronic acid for facial volumization.

Materials-Methods: In this in-vitro animal study, 11 dogs were studied by randomized and single blind method.2 subcutaneous parts in each dog's body was selected In which 0.5 CC of APAG and hyaluronic acid were injected in 2 contralateral areas. The dimension of the mound areas was measured by caliper after 1st, 2nd days, 1st week, 1st, 3rd and 6th months. The changes of mound area dimensions at different times on 2 modalities were statistically analyzed.

Results: The dimensional changes of the subcutaneous areas at different times was not significant. Similar trend was seen in the volume of subcutaneous areas in the studied times. The volume induced in the subcutaneous skin of the animals in 2 modalities was not significantly different when time was not considered.

Conclusion: Due to similar changes in the volume of injected areas by APAG and hyaluronic acid and together with advantages of plasma gel such as its provision from the patient's own blood and lack of allergic reactions APAG injection seems to be useful for the volumization objectives.

Keywords: Plasma gel, Hyaluronic acid, PRP







OP-006 Residual cysts involving four quadrants on the same patient: Case report

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Objective: Residual cysts are relatively rare inflammatory cysts of the jaws. Residual cysts are usually seen in men and are often found in the anterior region of the maxillary jaw. Residual cysts can reach large sizes without symptoms for years and cause extensive bone defects. They are usually asymptomatic and detected during routine radiographic examination. However, residual cysts cause pain when they are secondarily infected, and when they reach large sizes, they can cause facial asymmetry due to swelling.

Case: A 58-year-old female patient was admitted to our clinic with complaints of swelling and pain in the left lower jaw. Intraoral examination, orthopantomography and computed cone-beam tomography imaging revealed cystic lesions involving 4 quadrants in the jaws. Histopathological examination of the incisional biopsy taken from the 56x26 mm lesion in the left mandible was evaluated as a residual cyst. Decompression therapy was planned to protect the lower alveolar nerve and avoid the risk of pathological fracture. After the lesion in the left lower jaw was reduced with decompression therapy for 7 months, enucleation treatment was applied. The other 3 quadrants were treated with enucleation only.

Conclusion: Residual cysts can reach very large sizes in the jaws. Since they are usually asymptomatic, they can grow undetected for many years. In the treatment of large cysts, marsupialization is recommended to preserve bone volume and prevent damage to surrounding anatomical tissues.

Keywords: Residual cyst, Decompression, Enucleation







OP-007 Rapid Maxillar Expansion with 3D Study Model: A Case Report

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Introduction: Rapid maxillar expansion (RME) is a procedure used to correct posterior crossbite depending on transverse maxillary deficieny. RME provides a stable expansion in patients with closed cranial sutures and complete skeletel development. However, there has been shown a high rate of complications following this procedure and surgical study models could be help the practioner to avoid this unfavorable results. This report describes the preparation of preoperative surgical study model and the procedure of SARME in combination with Hyrax expander.

Case Presentation: Ninetenn years old, female patient was treated at the Department of Oral and Maxillofacial Surgery, School of Dentistry, Ege University, had a transverse maxillary deficiency and unilateral crossbite. CBCT scan was taken before expansion to assess the bone structures and to create a surgical guide. This guide designed with 3D design programme and produced with additive manifacturing with SLA 3D printer. At the day of surgery, Le Fort I osteotomy with pterygoid plate disjunction and seperation of midline between the central incisors were performed using piezosurgery, and the fracture was created. Midline diastema has been checked with and without Hyrax. After 4 days for consolidation, the screw was activated total of 15 days with 2 one-quarter turns daily after consolidation phase.

Conclusion: Following surgery, there was no complication related to asymetric expansion, resorption or tooth loss. Guided-surgery assisted RPE in combination with Hyrax expander may considered a safe and a simple procedure which allows to elimination of possible tissue damage and to achieve greater precision for orhodontic treatment.

Keywords: Additive Manifacturing, Rapid Maxillar Expansion, Study Model







OP-008

Evaluation of the efficacy of aromatherapy on anxiety, vital signs and postoperative complications after mandibular impacted third molar surgery

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Objective: Dental anxiety before wisdom tooth extraction is one of the important difficulty for the surgeons to perform surgical extraction procedure. Aromatherapy with essential oils has both psychological and physiological health benefits to patients. The aim of the study was to evaluate the effect of lavander oil aromatherapy on patient's psychological and physiologic findings during mandibular third molar extraction.

Materials-Methods: In this in vivo split-mouth study, the experimental study involved 25 patients aged between 18 and 40 years undergoing third molar extraction The groups were randomly divided into control and lavender groups. The lavender group inhaled 100% lavender oil for 15 min before the operation, the control group received no prior application. Physiologic changes were assessed using vital signs evaluations. Before and after completion of treatment, the participants rated their anxiety in modified dental anxiety scale. Both the groups received post-operative antibiotics and analgesics and were followed till adequate healing.

Results: There wasn't statistically significant difference in the mean anxiety scores was observed between both the groups. Significantly lower levels of saturation rate were found after extraction in the lavender group.

Conclusion: No significant difference was observed between the lavender group and the control group in the parameters examined.

Keywords: aromatherapy, dental anxiety, lavender oil







OP-009

Relationship between preoperative volumetric tomography measurement of maxillary intra-osseous vascular canal and intraoperative bleeding: a pilot study

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Objective: The objective of this pilot study was to investigate the relationship between the preoperative measurement of the maxillary intra-osseous vascular canal using volumetric tomography (DVT) and intraoperative bleeding in patients undergoing maxillary surgery.

Materials-Methods: A total of 10 patients who required maxillary surgery were included in this study. The size of the maxillary intra-osseous vascular canal was measured using DVT prior to surgery. Intraoperative bleeding was assessed by measuring the blood volume collected through the second suction during surgery. The relationship between the size of the canal and the amount of bleeding was analyzed using Pearson's correlation coefficient.

Results: The mean size of the maxillary intra-osseous vascular canal was 1.15 mm (SD = 0.34). The mean amount of intraoperative bleeding was 22.00 ml (SD = 15.68). The analysis showed a moderate negative correlation, which was unexpected between the size of the canal and the amount of bleeding (r = -0.50, p = 0.50). Although the negative correlation did not reach statistical significance, it's possible that the small sample size and other factors may have contributed to the unexpected findings, and further studies are needed to confirm the relationship between the size of the canal and intraoperative bleeding.

Conclusion: This pilot study provides preliminary evidence of a potential relationship between the preoperative measurement of the maxillary intra-osseous vascular canal using DVT and intraoperative bleeding in maxillary surgery. Further studies with larger sample sizes are needed to confirm these findings and to better understand the clinical significance of this relationship.

Keywords: sinus floor augmentation, posterior superior alveolar artery, volumetric tomography







OP-010

Temporomandibular joint psoriatic arthritis complicated with familial Mediterranean fever: a case report

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Objective: Familial Mediterranean fever (FMF) is a hereditary autoinflammatory disorder characterized by recurrent fevers, serositis, and inflammation without any infection. Psoriasis is a common chronic immune-mediated inflammatory disorder manifesting in the skin, joints, or both. Articular involvement, usually seen in medium - large joints, ranges between 40 and 70% of FMF patients. However, temporomandibular joint(TMJ) involvement in FMF is rarely seen. On the other hand, psoriatic arthritis(PsA) develops approximately in one out of every five patients with psoriasis. This study aims to present an FMF case that is simultaneously affected with psoriasis.

Case: A 40-year-old female patient presented with complaints of pain in the right TMJ region and limitation in opening the mouth. History revealed that the patient had been under treatment with FMF but also previously treated for psoriasis. In regards to TMJ problem, patient was treated with medical treatments, occlusal splints, and several arthrocentesis which all failed. Preliminary diagnosis as ankylosis and verified with advanced imaging modalities. After clinical and radiological evaluations, a disc was not detected in the intraarticular space, and deformation in the right TMJ, fibrotic changes, and ankylosis due to the advanced stage of arthritis were diagnosed. Under general anesthesia, open TMJ surgery for the release of ankylosis was carried out.

Conclusion: Anesthetic sprays, intraarticular dexamethasone injections, arthroscopic lysis, lavage, and physical therapy are recommended for the treatment of TMJ involvement in FMF or psoriasis patients. In cases where there is no response to these treatments, open TMJ surgery may be the only treatment option.

Keywords: Ankylosis, Familial Mediterranean fever, Psoriatic arthritis







OP-011

Do Subperiosteal or Zygoma Implants Have a Positive Effect on Facial Trauma? A Study of Finite Element Analysis of a Severely Resorbed Maxilla

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Objective: Investigation of the effects of trauma forces on the Le Fort lines of a severely resorbed maxilla reconstructed with either subperiosteal or zygomatic implants, using finite element analysis method.

Materials-Methods: Our study consists of 3 models. A cone-beam tomography was obtained from a human cadaver skull with a severely resorbed maxilla to create a baseline control model. The second model was created by designing and applying two custom-made subperiosteal implants for this edentulous maxilla. Finally, our third model was created by mimicking a quad-zygoma model for the same severely resorbed maxilla. Three increasing trauma forces were applied in the antero-posterior direction onto the anterior nasal spine of each model and the force distributions were examined at the pre-determined points on the Le Fort 1, 2, and 3 regions, using finite element analysis.

Results: The trauma from the anterior nasal region, our model with subperiosteal implant and our model with zygomatic implant were found to be more successful when evaluated in terms of stresses in Le Fort lines compared to our control model.

Compared to the control model, the models with subperiosteal or zygoma implants showed superior results in terms of trauma force distributions at the Le Fort lines.

Conclusion: The severely resorbed maxilla models reconstructed with custom-made subperiosteal implants or zygomatic implants may be considered more resistant to facial forces applied in the antero-posterior direction at the Le Fort 1, 2 and 3 lines, compared to the severely resorbed maxillary model without any hardware.

Keywords: trauma, subperiosteal implants, zygoma implants







OP-012

Comparison of Oral Health Outcomes and Treatment Recevied in Intellectually Disabled Age Groups: A Comparative Study

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Objective: Evaluation of dental treatment of intellectually disabled (ID) people is often confusing, since the wide range of ages (children,teenagers and adults), oral health problems and concomitant diseases. There have been many studies in pediatric ID patients but little is known about the differences between age groups in children or adults.

Materials-Methods: We hypothesize that children and adults with ID may have different oral health outcomes and that differences will be statistically significant. The DMFT/DMFS results, Community Periodontal Index of Treatment Needs (CPI-TN), functional occlusal pairs and units.Study population is the ID patient operated in general anesthesia between 2021-2023. All patients aged 14-65 were before general anesthesia and DMFT/DMFS, CPI, TN, occlusal unit and functional occlusal pairs data was collected. The patients were grouped according to ages on 14-24(group A) and >25 (group B) years. Study parameters were compared between this study groups.

Results: The number of patient of groups A and B were 17 and 21, respectively. The values of DMFT, DMFS, occlusal unit, functional occlusion pairs, number of missing teeth and number of missing tooth surfaces in our patients were in group A and group B have no difference between before surgery, after surgery and difference after surgery-before surgery. CPI data have difference between groups. TN data have no difference between groups

Conclusion: It was concluded that if patients are given tooth brushing education at an early age or if they are taken to multidisciplinary surgery, better results will be obtained in terms of the health of periodontal tissues and the treatment needs of patients will be reduced.

Keywords: General anesthesia, İntellectually disabled, Oral health







OP-013 Management of denosumab-related osteonecrosis of the jaw: Report of two cases

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Objective: Antiresorptive drugs are used to prevent bone metastases in cancer diseases and osteoporosis seen in the postmenopausal period. Antiresorptive effects of bisphosphonates and denosumab are frequently used as treatment options. However, the side effects of these drugs that cause osteonecrosis, especially in the jaw bones, are also known. Some studies shows that denosumab has a superiorty about skeletal-related event. On the other hand, some studies have proven that denosumab increases the risk of Medication-related osteonecrosis of the jaws MRONJ.

Case 1: A 42-year-old male patient is being treated for lung cancer. It was learned that MRONJ developed after tooth extraction due to periodontal disease. After the acute infection was treated, MRONJ was controlled with irrigation and sequestrectomy.

Case 2: An 82-year-old female patient using denosumab for osteoporosis was admitted to our clinic due to an acute infection in her lower jaw. The same treatment protocol was followed in this patient. At the end of the 3rd month, it was observed that the necrotic area was completely covered with epithelium and the complaints were resolved.

Conclusion: Although denosumab has a high risk potential for the development of MRONJ, the area of necrosis has a chance to improve with conservative treatment.

Keywords: Denosumab, DRONJ, Osteonecrosis





OP-014 A Case Series of Dentinogenic Ghost Cell Tumors and Calcifying Odontogenic Cysts: A Diagnostic Dilemma

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Objective: Dentinogenic ghost cell tumors (DGCTs) and calcifying odontogenic cysts (COCs) are rare odontogenic lesions whose histological diagnosis could be stated subjectively. The aim of this study was to evaluate and compare the demographic, descriptive and histological data of these pathological conditions and to discuss the nature of the histopathological characteristics of these two different conditions regarding differential diagnosis in a cellular level.

Materials-Methods: 25 cases with final diagnosis (13 DGCTs and 12 COCs) were retrospectively analyzed. Age, sex, localizations, radiological size and appearances, and preliminary diagnosis of the lesions have been evaluated. Histologically, presence of solid ameloblastic epithelial islands, keratinized ghost cells and dentinoid materials were investigated.

Results and Conclusion: In this study, histological nature, differences and similarities of DGCTs and COCs were investigated. Solid ameloblastic epithelial islands observed in the cysticcalled borders of the lesion, the presence of ghost keratinization, which is thought to be an analogue of odontogenic keratinization, and the observation of dentinoid material are main quantitations for histopathological examinations of these two lesions' final diagnosis. Although COCs are classified as cysts according to the current classification in the 5th Edition of the World Health Organization Classification of Head and Neck Tumors, it is more likely that it is below the tumor classification because of its components in the lining epithelium. Because of the similarity in histological components, further molecular studies are needed in order to understand the behavioral nature of these lesions and distinguish from each other.

Keywords: calcifying odontogenic cyst, dentinogenic ghost cell tumor, differential diagnosis







OP-015 The effect of antihypertensive drugs on dental implant stability

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Objective: Dental implants are in most cases the best option to replace missing teeth that show adequate longevity. More than 640 million people worldwide suffer from hypertension, which shows that a large proportion of patients who are planned for implants are hypertension patients. Studies have shown that antihypertensive drugs contribute to the bone formation process. Since the success of osseointegrated implants is highly dependent on bone formation and remodeling processes, the data may be of benefit for dental implants in patients using antihypertensive medication.

Materials-Methods: In our study, the study group consisted of patients with a history of at least 5 years of antihypertensive drug use, and the control group consisted of patients without a history of regular drug use. The same brand of implant (Megagen ST) was applied to both groups by the same surgeon. The used implant stability measuring device, Mega ISQ, was placed on the implants with a connecting screw called Smartpeg after the implant was applied, and the degree of resonance frequency analysis was determined. ISQ values were recorded as primary stability. This procedure was repeated at the postoperative 16th week during secondary stability and the value was recorded.

Results: As a result of statistical analyzes, primary and secondary ISQ values of patients using antihypertensive drugs were found to be significantly higher than patients who did not use any medication.

Conclusion: It has been proven that antihypertensive drugs have positive results on dental implant stability.

Keywords: Implants, antihipertensive







OP-016 Which lavage solution is more effective in TMJ arthrocentesis?

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Objective: TMJ arthrocentesis is a safe and successful minimal invasive procedure that is widely used to reduce TMJ pain. Two solutions commonly used for lavage in this procedure are saline (S) and Ringer's lactate (RL). The aim of this study was to compare effect of the S and RL solutions on clinical signs after TMJ arthrocentesis.

Materials-Methods: A total of 28 patients who underwent arthrocentesis, 12 of whom had disc displacement with reduction and 16 with disc displacement without reduction, were included in the study. Sterile saline used in 12 patients (group 1) and RL used 16 patients (group 2) during procedures. Preoperative and postoperative pain were recorded used visual analog scale (VAS) and maximum interincisal mouth opening was recorded.

Results: Mean maximum mouth openings were 29.7 ± 7.4 mm preoperatively and 36.1 ± 7.6 postoperatively in all patients and the difference was statistically significant (p<0.001). The mean preoperative VAS scores were 7 and postoperative VAS scores were 3. The difference was also significant (p<0.001). There was no significant difference between Group 1 and Group 2 according to the clinical signs and VAS scores.

Conclusion: Our study showed that TMJ arthrocentesis is a successful procedure to reduce TMJ pain and increase maximum interincisal opening. However, there is no significant difference between saline and Ringer's lactate on clinical signs after TMJ arthrocentesis.

Keywords: TMJ, arthrocentesis, solutions







OP-017 Reconstruction of Oronasal Fistula with Tongue Flap and Orbicularis Oris Flap: Report of Two Cases

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Objective: Oronasal fistula is the most common complication after palatoplasty. Multiple methods of fistula repair have been described. These include nonsurgical techniques utilizing palatal appliances and surgical techniques involving repeated mobilization of surrounding tissues by primary excision and closure of the fistula with adjacent mucosal or distant flaps such as tongue, nasolabial, buccal myomucosal, orbicularis oris and buccal fat pad. In this report we presented the surgical treatment of two oronasal fistula cases with tongue and orbicularis oris flap.

Case:

Case 1: A 17-year-old female patient with a recurrent anterior palato-alveolar fistula was reffered to our clinic. Her past medical history included several unsuccessful palatal cleft repairs. An anteriorly based tongue flap 2,5-3,5 cm in size was designed. The donor site was closed directly using deep interrupted sutures. The patient was placed on an oral soft diet from the first postoperative day, followed by a semisolid diet. After 3 weeks, the base of the flap was separated under local anesthesia. One month follow up reveals successful healing of the fistula.

Case 2: An 18-year-old male patient with a recurrent anterior palato-alveolar fistula was operated using partial orbicularis oris muscle for nasal floor closure. His medical history included an unsuccessful palatal cleft repair with bone graft. Double-layered (partial orbicularis oris plus cheek mucosal flap technique was used to close the fistula. Two years follow up reveals successful healing of the fistula.

Conclusion: In challenging cleft palate patients, reconstruction with vascularized flaps is a good treatment of choice.

Keywords: orbicularis oris flap, oronasal fistula, tongue flap







OP-018 Evaluation of the Survival Rate of Dental Implants in the Anterior Mandible

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Objective: Three dimensional change of alveolar crest leads to limitations for dental implant placement, and this change in posterior regions of mandible needs to alternative surgical procedures. To improve functional support and to increase the oral health-related quality of the patients, implant placement in anterior mandible for over-denture or fixed prosthesis has been studied in years. Indeed, the optimal number and position of the implants are still unclear. This report presented the six-implant placement in the anterior mandible to support fixed prosthesis for edentulous patients, and the survival rate of the implants.

Case: Fourteen patients were treated at the Department of Oral and Maxillofacial Surgery, School of Dentistry, Ege University, had a bilateral posterior alveolar bone deficiency. Cone beam computed tomography scan was taken before surgery to assess alveolar bone dimension. Patients received six narrow implants with or without bone augmentation in the anterior mandible, and after 4-months, implant-supported fixed prosthesis was completed. Implant success and survival rate were analysed during 3-year follow-up.

Conclusion: A total of 84 implants were placed in the anterior mandible and lateral ridge augmentation was performed for 50 implants. No healing disorder or infection was observed following surgery. The survival rate of implants was calculated 97% for non-augmented and 100% for augmented sites. The results revealed that six-implant supported fixed prosthesis might be prefer to achieve rehabilitation of patients, with predictable outcomes.

Keywords: Anterior mandible, implant, survival







OP-019 Pathological Fracture of the Mandible Caused by Radicular Cyst

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Objective: Mandibular fractures are common after high energy facial injury; they represent 36% to 59% of all facial fractures. However, pathological fractures of the mandible are uncommon and represent less than 2% of all mandibular fractures. This kind of fracture occurs from a very low energy injury or normally tolerated loading forces in a bone weakened by a pathological condition. Pathologic fractures of the maxillofacial region most frequently result from osteoradionecrosis and it is very interesting that cysts, which are so common in this area, cause fractures.

Case: A 47-year-old male patient was admitted to our clinic with a complaint of pain in the right mandible, accompanying by malocclusion. An orthopantomograph (OPG) showed a large radiolucent lesion that was associated with an obvious fracture line in the corpus mandible. For treatment, complete removal of the cyst combined with open reduction and internal fixation was planned. Under general anesthesia, an arch bar was applied and intermaxillary fixation was achieved with elastics. The mucoperiosteal flap was removed with an intraoral incision. Excisional biopsy of the cyst was performed and for the reduction of the fracture, 1 7-hole mini-plates and 4 mono cortical screws were applied.

Conclusion: Pathologic fractures that are associated with odontogenic cysts are rare. Radicular and residual cysts are the most common types of odontogenic cysts associated with pathologic fractures. Regular follow-up visits with radiographic images are required in cases of asymptomatic teeth and periapical lesions to avoid more complications.

Keywords: open reduction and internal fixation, pathological fracture, radicular cyst







OP-020 The Assessment of Orbital Dystopia in Patients with Dentofacial Deformity

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Objective: The purpose of this study was to evaluate vertical and horizontal orbital dystopia in patients with dentofacial deformity.

Materials-Methods: This retrospective study included 79 patients with dentofacial deformities who underwent pre-operative CBCT scans and orthognathic surgeries between 2019 and 2022. Bilateral hard tissue measurements were performed using virtual orthognathic planning software (NemoFAB, Nemotec, Spain). Five horizontal and three vertical measurements were taken, and dentofacial deformity severity was classified by using the TML system.

Results: Out of 79 patients, 56 had Class III and 23 had Class II skeletal deformities, 27 were male, and 52 were female (the mean: 27.64 ± 6.27 years). When comparing patients by gender and Angle classifications, no significant differences were found (p > 0.05). Statistical analysis revealed a correlation between the vertical difference of the right and left gonions and the distance of the pogonion to the midline (r = 0.256, p = 0.02). However, no correlation was determined between the severity of orbital dystopia and the vertical difference of the gonions (r = -0.099, p > 0.05). Orbital dystopia was detected in 51 patients according to the M deformity classification. Patients with L3 deformity showed a significant difference in the contralateral gonion of the menton deviation (p = 0.001).

Conclusion: In our study, we discovered that patients with dentofacial deformity also had concurrent orbital dystopia. Nevertheless, the lack of correlation about the severity indicates that the orientation of the head position relying on the orbital region alone for orthognathic surgery plans may lead to erroneous results.

Keywords: dentofacial deformity, orbital dystopia, virtual planning







OP-021

Evaluation of the in vivo efficacy of bone grafts containing biphasic calcium sulfate and ostrich eggshell and membrane powder in peri-implant bone defects

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Objective: Our study evaluated the effectiveness of a mixture of biphasic calcium sulfate and ostrich eggshell/ostrich shell membrane powder on bone defects around dental implants.

Materials-Methods: 16 adult New Zealand rabbits were used in the study. After the implant was placed in each rabbit's right and left femur bones, a defect was created on one side of the implant. Graft containing biphasic calcium sulfate (BCS), graft containing eggshell powder and membrane protein (EMP), graft containing eggshell powder (EPG) were applied to each defect. In addition, a control group was created (n=8). After 3 months, the animals were sacrificed. All samples were analyzed by histomorphometric method and micro-CT imaging, and data were statistically analyzed with one-way ANOVA and Tukey HSD testing (p=0.05).

Results: according to histomorphometric analysis, osteoblastic cells were observed in a single row on the surface of the particles in the graft groups. In addition, multinucleated foreign body giant cells were found in the EPG and EMP groups. When the bone area percentages between the groups were compared, no significant difference was found between the BCS and EMP groups (P>0.05). (MICROCT) measurements with bone-implant contact (BIC) respectively BCS(37.01±3.69), EMP(29.09±1.44),EPG(26.39±2.62), and CONTROL(24.45 ±2.02). The BCS and EPG groups differed statistically from the CONTROL group (p<0.05).

Conclusion: Our experimental study, which we have done within limitations, is promising because of the osteoblastic activity in the graft materials obtained from the ostrich egg shell and the low number of multinucleated foreign body giant cells.

Keywords: biphasic calcium sulfate, dental implant, eggshell powder





OP-022

Evaluation of Stress Distributions In Models Created With Different Methods And Numbers of Zygomatic And Dental Implants In Atrophic Maxilla By Finite Element Analysis

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Objective: The goal of this study is to evaluate the stress values on bone tissues and implant surfaces under buccal and palatal oblique and occlusal vertical forces by placing dental and zygomatic implants with different numbers and different plans in an atrophic maxilla by finite element analysis.

Materials-Methods: In this study, there were 3 different implant placement plans and in these plans the zygomatic implants were placed with 2 different techniques (intrasinus and extrasinus). In Model 1 and 2 a quad zygoma implant was placed with the intrasinus and extrasinus technique respectively. In Model 3and 4,2 conventional dental implants were placed in addition to the dual zygoma implants placed with the intrasinus technique and the extrasinus technique. In Model 5 and 6,4 conventional dental implants were placed in addition to the dual zygoma implants technique and the extrasinus technique of vertical forces from the central fossa, oblique forces from the buccal tubercles and the palatal tubercles of teeth 4 and 6 in the posterior region were applied to the models.

Results: It was observed that the stress values were inversely proportional to the number of implants and decreased with the increase of the number of implants. Oblique forces caused more destructive effects than vertical forces, and palatal forces created more stress than buccal forces. The least stress occurs in the Model 6.

Conclusion: We thought that dental implants placed in the zygomatic implants reduce the stress on the model, oblique forces create more stress than vertical forces, intrasinus and extrasinus techniques are equal.

Keywords: atrophic maxilla, finite element stress analysis, zygomatic implants







OP-023

Closure of the Defect with Bichat Fat Tissue Flap After Treatment of the Cyst located in the Maxillary Sinus - A case report

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Introduction: Case Presentation: Radicular cyst is the most common type of odontogenic cyst associated with the apex of non-vital teeth. The lining of the radicular cyst usually arises from the epithelial rests of Malassez. This cyst usually persists even after the elimination of microbial load of the related root canals.

Case: A 17-year-old female patient applied to our clinic with complaints of caries, swelling and pain in the posterior region of the maxilla. While having no systemic disorder, she was observed to have, expansion in the buccal region, decreased mouth opening, severe tissue loss in tooth 16, in her intraoral examination. The swelling was told to appear slowly int he last one month accompanying with pain. The tooth 16 was devital, while the teeth 13, 14, 15 and 17 served a delayed response to the vitality test. As the histopathologic evaluatin of the biopsy resulted as radicular cyst, a customized compression plate was placed in the extraction socket for marsupialization treatment. The patient was informed about marsupialization and followed for 9 months As the cyst dimention was reduced enough, enucleation was performed and the fistula formed by the decompressiom plate through cystic cavity was closed primarily by the bichat fat tissue flap. Postoperative controls after 3 months served to observe no recurrence.

Conclusion: For the primary closure of defect and fistula tracts in the maxillary region, adipose tissue flap displacement is accepted to be an effective and reliable treatment method.

Keywords: Bichat, Cyst, Marsupialization







OP-024

Comparison of Survival Rates of Long Implants with Vertical Augmentation and Short Implants in the Posterior Region of the Jaws

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Objective: Dental implants are frequently used for patients with complete or partial edentulous jaw. Atrophy, inadequate bones and pneumatized maxillary sinus limits the applications of dental implants. Additional augmentation techniques such as guided bone regeneration, bone grafting treatments and sinus lift are used for implant surgery instead of short implant. The aim of this study is to compare the age, gender, mesial and distal bone losses in long implants that placed after augmentation with short implants.

Materials-Methods: 102 patients who were admitted in Erciyes University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery between 2009-2021. Patients were divided into the two groups. Group I was included short implants(<=6mm) and group II was also long implants(>=8mm with augmentation). The peri-implant bone loss was calculated on orthopantomograph at least one year observation for each groups.

Results: There is no statistical significant differences between age, gender and terms of marginal bone loss in all groups(p>0,05). A statistical significant difference is found in distal marginal bone loss is observed in long implants which were placed after augmentation compared to short implants(p<0,05). Also, the mesial marginal bone loss of short implants is similar to long implants.

Conclusion: Short implants are an alternative technique for prosthetic rehabilitation in severely atrophic jaws due to cost, reduced morbidity and augmentation procedures. The study showed that short implants have shown similar success rates to long implants in terms of patient satisfaction while providing faster results at a lower cost.

Keywords: long implants, short implants, survival rate







OP-025 Have to perform an Orthognathic Surgery without an intermediate splint

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Objective: The aim of orthognathic surgery is to improve the function and aesthetics of the jaws. Planned 3D movements are transferred via conventionally or digitally produced surgical splints. The purpose of this case report is to present a surgery with a digitally misprinted intermediate splint noticed at the intermaxillary fixation phase of the surgery.

Case: A 22 year old male patient with Class 3 skeletal anomaly underwent bimaxillary orthognathic surgery, within the plan of 8mm maxillary advancement and 3mm posterior impaction, and 5 mm mandibular set-back. Surgery was planned via virtual planning program (Nemo Software) with mandible first approach. Surgical splints were fabricated and checked for the occlusal adaptation. After completing the bilateral sagittal split osteotomy, senior surgeon noticed an error in the fabrication of the intermediate splint. Upon realizing that the final splint was printed instead of the intermediate splint, the surgical procedure continued, and the mandible was placed by senior surgeon without an intermediate splint and fixed into the desired 3D position. LeFort 1 osteotomy was performed and maxilla placed into the estimated position with final splint.

Conclusion: Digital technology has become more popular on planning orthognathic surgery. However, due to its virtual base, it is possible to encounter some problems. In this case, splints were only checked for the occlusal adaptation but not checked for the overjet and overbite. It is recommended to double check the splints by the Orthodontist and by the responsible Surgeon for both occlusal adaptation, overjet and overbite in terms of the surgery plan

Keywords: virtual planning, orthognathic surgery, splint







OP-026 Treatment of Childhood Trauma Related Temporomandibular Joint Ankylosis: A Case report

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Objective: Temporomandibular joint ankylosis is a rare and debilitating condition. The major etiological factor is trauma in young age. This is due to greater potential of growth when compared with adults. The aim of the treatment of ankylosis is to achieve effective mouth opening and to maintain the obtained mouth opening. In this case, we will present the treatment of joint ankylosis due to trauma.

Case: A 12-year-old male patient had an accident 3 years ago and stated that his mouth opening was restricted and he had feeding problems for the last 6 months. As a result of the clinical and radiological examination, the patient's mouth opening was measured 11 mm, while the left lateral movement was 6 mm, the right lateral movement was 0 mm. It was observed that ankylosis developed in the lateral part of the left TMJ. It was planned to surgically remove the ankylosis region in the left joint region of the patient and increase the mouth opening. Surgical treatment was performed using a preauricular approach with piezzo-surgery system, and condylar mobility was observed. All procedures were performed under general anesthesia. During the operation, the mouth opening was increased up to 34 mm. Post-operatively, aggressive physical therapy was applied for 1 month and the mouth opening was increased up to 41 mm.

Conclusion: TMJ ankylosis is an effective surgery that can be treated with a preauricular approach. In addition, the use of piezzosurgery system increases the safety of the operation and reduces the risk of complications. In addition, aggressive physical therapy helps to prevent reankylosis.

Keywords: Ankylosis, Temporomandibuler Joint, Childhood Trauma







OP-027 Management of the bilateral cleft lip and palate patient with rotated premaxilla: a case report

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Objective: In bilateral cleft lip and palate (BCLP), premaxilla is usually only fixed to the vomer bone cranially. The lack of continuity with the entire related structures causes premaxillary protrusion, deviation, or segment rotation. If the extreme abnormalities in the premaxillary position cannot be managed primarily, it continues to cause aesthetic, functional, and psychological problems. Therefore, it is necessary to reposition of premaxilla surgically. This study aims to present treatment for a BLCP patient with rotated premaxilla.

Case: A 15-year-old male patient with BCLP presented with complaints of missing teeth, malocclusion, functional (feeding, speaking etc.), and esthetic problems. Clinical and radiological evaluation revealed that the patient's premaxilla rotated posterio-cranially and positioned horizontally by the nasal floor. In the first stage, under general anesthesia, premaxilla rotated into the moreless desired anteroinferior position and secured with vestibular mucosal tissues laterally and orthodontic archwires without using additional forces. Second-stage surgery was planned five months later. Premaxilla vascularization was followed and no complications were observed. Therefore, second surgery for alveolar cleft repair was carried out. Under general anesthesia, autogenous graft from anterior iliac crest area was obtained and used for reconstruction.

Conclusion: In patients with BCLP, reconstructive options including osteotomizing the premaxilla and secondary alveolar bone grafting can be necessitated. In our case, we have to stage the reconstruction because of the severity of the displacement to avoid the loss of the segment due to extended incisions and flap designs.

Keywords: Bilateral cleft lip and palate (BCLP), Alveolar cleft repair







OP-028 Abnormally Displaced Impacted Tooth: Orbital Floor

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Objective: Impacted teeth often abnormally displace into ectopic positions. Teeth may be displaced in many places such as the maxillary sinus, nasal floor, orbital floor or pterygomaxillary area due to many reasons such as pathology, trauma or iatrogenic reasons. The purpose of this presentation is to describe a rare case of removing of an abnormally displaced impacted tooth from the orbital floor.

Case: A 23-year-old male patient reported that fluid coming into the mouth from the cyst area, pain and swelling in maxilla that occurs from time to time. The patient gave no positive medical or family history. On clinical examination, tender swelling and missing maxillary left third molar were observed. The patient's orthopantomogram revealed an impacted third molar superiorly displaced into maxillary sinus. To ascertain the position further, a CBCT scan was undertaken to ascertain the location, extent and access of the pathology. In CBCT examination, it was decided that the impacted tooth was associated with the orbital floor and the observed lesion was an odontogenic cystic pathology. The patient was operated for enucleation of the cyst along with extraction of the involved first, second and third molar teeth via open transsinusoidal approach under general anesthesia. Differential diagnosis were; dentigeorus cyst, keratocystic odontogenic tumor and ameloblastoma. Histopathology of the excised specimen confirmed dentigerous cyst.

Conclusion: Impacted teeth often abnormally displace into ectopic positions such as nasal floor or orbital floor. In this rare case;transsinusoidal approach was observed for enucleation of cyst and removing of impacted tooth displaced orbital floor.

Keywords: Dentigerous Cyst, Orbital Floor





OP-029

Evaluation Of Postoperative Infection And Pain Symptoms With Neutrophil-Lymphocyte Ratio Level: A Prospective Preliminary Study

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Objective: Inflammation plays an essential role in developing and progressing postoperative pain and infection. Neutrophil-Lymphocyte Ratio (NLR) is a cheap and reliable marker of immune response to various infectious and non-infectious stimuli. This study was aimed to determine the mean NLR value after orthognathic surgery and the relationship between preoperative and postoperative NLR values with postoperative pain, complications and analgesic requirement. In addition, the effect of operation time on NLR was investigated.

Materials-Methods: This prospective clinical trial was conducted on 24 patients who underwent orthognathic surgery between October 2022 to April 2023 in Istanbul Medipol University Oral and Maxillofacial Surgery Department. NLR values and visual analog scales (VAS) were obtained on the preoperative (T0), postoperative 1st day (T1). Demographical data, type of surgery, operation time, intraoperative bleeding, and postoperative analgesic usage were also recorded.

Results: Pre- and postoperative mean NLR values were $2.08\pm0.82\ 8.06\ \pm4.63$, respectively. There was a moderate correlation between the operation time and postoperative NLR values (r=0.31). Pre- and postoperative NLR values change statistically significant (p < 0.001). There was weak linear correlation between analgesic consumption and NLR value.

Conclusion: The findings suggest that; in patients who undergo orthognathic surgery, i) the operation time and NLR value were positively related; ii) NLR increased in the postoperative period; iii) postoperative high NLR value is weakly associated with greater postoperative analgesic consumption.

Keywords: Neutrophil-Lymphocyte Ratio, Orthognathic Surgery, Postoperative analgesia






OP-030 Graft versus Host Disease Associated with Hemimasticatory Spasm: A Case Report

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Objectives: Musculoskeletal symptoms in chronic graft versus host disease (GVHD) following allogeneic hematopoietic stem cell transplantation (allo-HSCT) is a rare complication. This condition considerably reduces the patient's quality of life.

Methods: The current case report represents the treatment of the rare case of a 23-yearold male patient, who is suffering from hemimasticatory spasm, specifically in the masseter muscle, associated with GVHD. He applied to our clinic with severe bruxism, limited mouth opening, jaw locking, pain, and masseter hypertrophy that developed 2 years after allo-HSCT for acute lymphoblastic leukaemia. The masseter spasm and abnormal contractions were confirmed by ultrasonographic imaging (USG). The patient received Botulinum Toxin A (Botox) injections to the masseter and temporalis muscles. On the 3rd day of injection, the patient's hemimasticatory spasm completely resolved and mouth opening increased. No symptoms were observed in the patient's 3rd month follow-up. In conclusion, it is favourable for GVHD patients to undergo regular gnathology examinations. Early treatment with Botox injections in the presence of certain symptoms is essential for the patient's quality of life.

Keywords: Graft vs Host Disease, Botulinum Toxins, Hemimasticatory Spasm







OP-031 Conservative Management Of A Misdiagnosed Ameloblastoma In A Pediatric Patient

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Objective: Ameloblastoma is the most frequent odontogenic tumor of the jaws and due to its locally aggressive nature, severe complications including pathologic fractures may occur if untreated. In recent years, unicystic type of ameloblastoma has been recommended to be managed with more conservative methods. This report aims to present a case of ameloblastoma which was initially misdiagnosed and treated as dentigerous cyst.

Case: A 8-year old girl referred to our department with swelling on the left side of mandible. Radiological examination revealed an extensive radiolucent, unilocular, cystic lesion surrounding the unerupted second molar and green-stick fracture of mandibular border. Since the incisional biopsy was compatible with dentigerous cyst, initial decompression was performed. The patient underwent enucleation surgery after 3 months of decompression, however, final biopsy of the lesion was ameloblastoma. Significant bone formation and reduction in patient complaints were observed in the postoperative 6-month follow-up.

Conclusion: Conservative management of ameloblastoma may be a viable option to reduce morbidity and risk of overtreatment of pediatric patients. However, close follow-up of the patient is essential to prevent further complications.

Keywords: Ameloblastoma, Conservative Surgery, Pediatric Patient







OP-032 Segmented LeFort I Maxillary Osteotomy Experience: A Retrospective Follow Up of 76 Patients

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Objective: Segmentation of the maxilla can be performed for correction of open bite deformity, as well as for transverse widening of the maxillary arch. In order to achieve predictable and stable results with this technique, maxillofacial surgeons should be aware of the indications and complications of segmenting the maxilla.

Materials-Methods: A total of 76 patients with an indication for Le Fort I osteotomy with multi-piece segmentation were included in this study. All surgeries were performed by the same experienced maxillofacial surgeon. Indications of multi-piece maxillary segmentation and complications after segmentation such as root injuries, periodontal injuries, oro-nasal fistula and gingival necrosis are discussed.

Results: In 5 cases the maxilla was segmented into 2 pieces between the central incisors. In the remaining cases, segmentation of the maxilla was done in 3 pieces where vertical osteotomies were performed either between canine-premolar (2 cases) or lateral-canine (69 cases). 2 root injuries (2.63%),2 periodontal injuries (2.63%), 5 oro-nasal fistulas (6.57%) and one gingival necrosis (1.31%) occurred.

Conclusion: If performed correctly LeFort I segmented maxillary osteotomy is a safe and stable surgical procedure in cases of open bite deformity and transverse maxillary deficiency

Keywords: LeFort I, maxillary segmentation, orthognathic surgery



OP-033 The Impact of Excessive Screw Lengths on Postoperative Mucosal Thickening in Le Fort I Osteotomy

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Objective: This study aimed to investigate the relationship between screw lengths in Le Fort I osteotomy and postoperative complications.

Materials-Methods: The study involved 37 patients who had undergone Le Fort I osteotomy with or without mandibular surgery and had postoperative CT scans. Gender and age data were collected from medical records, and screw lengths and bone widths were measured from CT scans. Postoperative complications such as maxillary mobility and mucosal thickening were recorded.

Results: The study population included 25 female and 12 male patients with a mean age of 26.49±6.75 years. A total of 592 screws were used, with 530 (89.5%) being long and 62 (10.5%) being of sufficient length. The statistical analysis revealed a significant difference in bone thickness between the anterior and posterior regions, with the anterior plating having a mean bone thickness of 5.45 ± 1.72 and the posterior plating having a mean bone thickness was found between males and females in either region (p>0.05). However, there was a significant difference in the occurrence of mucosal thickness between regions with screws of excessive length (n=278) and those with screws of sufficient length (n=18) (p=0.033).

Conclusion: The findings of this study suggest that accurate screw length measurement in Le Fort I osteotomy is essential in reducing the risk of postoperative mucosal thickening.

Keywords: Le Fort I Osteotomy, Mucosal Thickening, Screw Length







OP-034 Misdiagnosis Due to Trismus in Malignancy: A Case Report

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Objective: This report aims to raise awareness following a case of misdiagnosis of carcinoma presenting with features of Temporomandibular Disorders (TMD).

Case: A 72-year-old male patient who was under neurology follow-up with the diagnosis of trigeminal neuralgia was referred to our clinic with complaints of pain on the left side of his face, pounding earache, jaw pain, headache, and difficulty in opening his mouth for two months. Due to symptoms of limited mouth opening, severe pain in the left condyle, and decreased lateral movements to the right, the patient was preliminarily diagnosed with disc displacement without reduction, and MRI and arthrocentesis were planned. An MRI scan of the temporomandibular joints failed to uncover any joint pathology. Before the arthrocentesis procedure, mouth opening was limited to 11 mm. After the procedure, mouth opening increased to 18 mm, but the procedure could not be continued due to a locked ending. At the follow-up appointment one week later, mouth opening was still 18 mm, and the pain continued on the left side. ENT and neurology consultation were requested due to complaints of fullness in the ear and pain in the left maxillary sinus region. A new MRI of the cranial scan, requested by the specialists, revealed a left nasopharyngeal mass, and the patient was referred to oncology.

Conclusion: This report emphasizes the possibility that malignancy presenting with trismus may be misdiagnosed. Therefore, malignancy could be considered in the differential diagnosis of cases with trismus.

Keywords: Malignancy, Temporomandibular Disorders, Trismus





OP-035

Effect of systemic oxytocin administration on the healing of mandibular fractures: First results

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Objective: Mandible fractures are the most commonly treated fracture types by maxillofacial surgeons. Accelerating the healing of mandible fractures will provide patients with faster functional recovery in terms of temporomandibular joint disorders, malnutrition and periodontal problems. Reducing the healing time in the treatment of these fractures has recently become an important issue. In this experimental study, the effects of oxytocin on the mandibular fracture in rats at 3 different healing stages were evaluated.

Materials-Methods: This experimental study was conducted on 42 male wistar albino rats. In our study, control and experimental groups were planned to perform sacrification on the 10th, 20th and 30th days to evaluate the different bone healing stages. Therefore, 3 experimental and 3 control groups were formed in the study. 10 μ IU/kg of systemic oxytocin was administered daily to all experimental groups. Densitometric results at the fracture line were evaluated on periapical radiographs.

Results: The mean bone gray value of the mice in the control groups was 0.87. The mean bone gray value of the mice in the experimental groups was 1.25. The difference between the mean bone gray value of these groups was statistically significant.

Conclusion: Oxytocin increases osteoblast differentiation and function, resulting in increased bone formation. Studies have shown that treatment with oxytocin causes an increase in intracellular calcium levels and regulates the stimulation of osteoblast formation and thus bone formation in rats. In our study, the bone gray value at the fracture line was found to be significantly higher in the groups administered oxytocin.

Keywords: mandibular fracture, oxytocin







OP-036 I-PRF for the Treatment of FMF Related TMJ Arthritis: A Technical Report

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Objective: Familial Mediterranean fever (FMF) is the most prevalent inherited monogenic autoinflammatory disease. Few cases of temporomandibular joint (TMJ) involvement are reported in the literature. TMJ involvement causes acute synovitis, trismus, chronic pain. Arthrocentesis is the least invasive method for removing inflammatory mediators. I-PRF in combination with arthrocentesis contributes to the reduction in pain and an increase in maximum mouth opening in patients with internal derangement of the TMJ. In this report, the case of a patient who had FMF with TMJ and surrounding tissue inflammation and the management of this condition with I-PRF are presented.

Case: Fourteen-year-old male FMF patient referred to Baskent University Department of Oral and Maxillofacial Surgery with the complaint of swelling and pain associated with limited mouth opening after a mild trauma at the left TMJ. He was under colchicine treatment. Maxillofacial BT revealed the resorption of left TMJ. The patient was consulted to his rheumatologist for drug regulation and arthrosynthesis was planned under sedation. I-PRF injection was performed after ultrasonography guided irrigation of TMJ. The patient's symptoms were immediately relieved. Second arthrosynthesis was performed after 3 months.

Conclusion: The aim of FMF treatment is to ensure complete prevention of unprovoked attacks and minimize subclinical inflammation between attacks. Although there is not a consensus regarding the treatment of FMF related TMJ arthritis, non-invasive methods can be beneficial and I-PRF has the potential of promoting cell proliferation, stimulate matrix and collagen synthesis, osteochondral formation and has anti-inflammatory effects. As autoinflammatory diseases have overlapping symptoms which can be misdiagnosed, it is important to assure accurate diagnosis and appropriate medical follow-up and treatment.

Keywords: Familial Mediterranean fever, Temporomandibular joint arthritis, TMJ inflammation







OP-037 Does sedation play a role in local anesthetic systemic toxicity?

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Introduction: Local anesthetic systemic toxicity (LAST) is a serious medical condition that can occur when high doses of local anesthetic is administered to a patient. Symptoms of systemic local anesthetic toxicity include altered mental status, seizures, respiratory depression and hypotension. In extreme cases, it can even lead to cardiac arrest and death if not treated promptly and appropriately. Toxicity may not be immediately noticeable in sedated patients and may lead to more severe consequences. In this presentation, 3 patients who underwent surgery under sedation in our clinic and developed LAST will be described.

Cases:

Case1: A 40-year-old 30 kg female patient with Anorexia Nervosa underwent full mouth implant surgery. Agitation, confusion and tachycardia occurred following administration of 6 cartridges of articaine + epinenephrine (80mg/2ml + 0.02mg/2ml).

Case2: A 30-year-old 48-kg female healthy patient underwent full mouth implant surgery. Agitation and seizure were observed following application of 7 cartridges of articaine + epinenephrine.

Case3: 47-year-old 47 kg female patient with DM disease is present underwent full mouth implant surgery.Dizziness, tinnitus and blurred consciousness developed following 5 cartridges of articaine + epinenephrine. LAST was considered in all 3 patients, necessary treatments were applied and no complications developed.

Conclusion: LAST is a rare but devastating complication of local anesthesia. Recognizing and treating LAST is critical for clinicians administering these drugs. It is more difficult to diagnose under sedation. The question here is: does sedation play a role in LAST development?

Keywords: local anesthetic, sedation, toxicity



OP-038 A case series of glandular odontogenic cyst: What is emphasized in the new edition of WHO classification?

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Objective: Glandular odontogenic cyst (GOC) is a rare developmental odontogenic cyst. The diagnostic criteria emphasized in 2017 World Health Organization (WHO) classification of odontogenic lesions has changed in the new edition of WHO classification published in 2022. The aim of this case series was to present the patients having glandular odontogenic cysts treated in single center and discuss the updates in the new edition of WHO classification.

Case: Eight cases (4 female, 4 male) which were histopathologically diagnosed as GOCs were included in this case series. The demographic data, radiographic features, and histopathologic findings were reported in all the cases. The mean age was 47 + 11.9 years (22-68 years). The mean follow-up was 9 + 5.2 months (1-18 months). Five patients were asymptomatic at presentation, whereas 3 patients had mild pain and complaints of swelling. Three of the lesions were excised from the anterior mandible, 4 from the posterior mandible and 1 from the posterior maxilla.

Conclusion: GOC is an uncommon cystic lesion showing non-specific clinicoradiographic characteristics which may resemble a wide-spectrum of jaw lesions. A final diagnosis can only be obtained after a careful histopathologic examination. Conservative surgical management was performed in all cases. No lesions showed recurrence within the follow-up period in this case series.

Keywords: Glandular odontogenic cyst





OP-039

Efficacy of Botulinum Toxin on Masticatory Performance, Orofacial Pain, Nutritional Intake and Anthropometric Measurements: A Pilot Study

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Objective: This study aimed to evaluate the effectiveness of botulinum toxin injections on masticatory performance, orofacial pain, and nutritional status in patients with orofacial pain disorders over a 6-month follow-up period.

Methods: Demographic characteristics, masticatory performance, orofacial pain, anthropometric measurements, and nutritional intakes of six patients who were administered botulinum toxin injections were evaluated from April 2022 – March 2023. The masticatory performance was evaluated by using a color-changeable chewing gum, and nutritional intakes were taken at baseline, post-op 1, and 6 months. Orofacial pain was assessed using the Fonseca Anamnestic Index (FAI) and Visual Analog Scale (VAS) at baseline, post-op 7 days, 1., 2., 3., and 6 months. Anthropometric measurements were taken at baseline and post-op 6th month.

Results: The masticatory performance significantly decreased post-op 1 month and remained similar at 6 months compared to baseline (p=0.006). FAI scores significantly decreased over the 6-month follow-up (p=0.030), while VAS score changes were not significant (p=0.075). After 6 months, from anthropometric measurements, only body weight increased significantly (p=0.028). There were no statistical differences between energy, macronutrients, saturated, mono, and polyunsaturated fatty acids, cholesterol, and fiber intake at baseline, post-op 1, and 6 months.

Conclusion: Botulinum toxin injections decreased masticatory performance and orofacial pain over 6 months. However, body weight increased, although food intake did not change. Factors causing body weight gain should be studied in larger sample groups in further studies.

Keywords: Botulinum Toxin A, Bruxism, Masticatory Performance







OP-040 Rare maxillomandibular congenital syngnathia with multidisciplinary treatment

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Objective: Congenital maxillomandibular syngnathia is a rare condition that presents itself at or shortly after birth through a fusion of jaw to craniofacial bones. In the literature, the etiopathology of syngnathia remains unknown, and various hypotheses have been proposed. Syngnathia primarily affects mouth opening causing difficulty in feeding and respiration. Cause of the rarity and varied presentation of this condition, there is no definitive management protocol available for congenital syngnathia. The aim of this study is to report rare congenital bilateral zygomatic-condylar fusion with multidisciplinary treatment and follow-up.

Case: The 10-year-old male patient was referred to our Oral and Maxillofacial Surgery Department of Baskent University Hospital with approximately 10 mm of limited mouth opening and mandibular hypoplasia. In anamnesis there was no medical history and any other associated syndrome. No history of difficulty during delivery and no known previous history of facial trauma was reported. After a detailed evaluation of computed tomography and consultation of Orthodontic Department, bilateral coronoidectomy was performed under general anesthesia. Following the surgery 10 sessions of physiotherapy was administered and after 3 months of follow up his mouth opening increased to 32mm.

Conclusion: In patients with congenital maxillomandibular syngnathia, maxillary and mandibular retrognathia is common because of the fusion area which effects the condylar growth center. In literature, response of condylar growth center to orthodontic appliances are controversial. In this case that our outcomes were positive with orthodontic appliance that patient's mouth opening increased which improved the quality of life.

Keywords: Congenital maxillomandibular syngnathia







OP-041 Comparison of Biomechanical Properties of TMJ Prostheses Manufactured by Machining and Powder Metallurgy

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Objective: Patients suffering from end-stage temporomandibular joint disease or ankylosis can be treated by application of temporomandibular joint prostheses. Aim of this study is to compare any biomechanical differences between machine (MP) and powder metallurgy (PM) fabricated TMJ prostheses.

Materials-Methods: A total of 14 specimens (7 in each group) were included. These specimens were tested under dynamic and static loaded conditions using Instron (Massachusetts,USA) Universal Test Machine for static tests and Labiotech (Ankara,Turkey) Servohydraulic Test Machine for dynamic tests. 1 million cycles were applied for dynamic tests. Yield loads, compression stiffness values and fatigue limits were compared for both groups.

Results: The mean yield load was calculated as 1253.33 N for the MP and 1273.33 N for the PM specimens. The mean compression stiffness of MP and PM specimens were determined as 1583.17 N/mm and 1038.75 N/mm, respectively. The fatigue limit of the MP was determined as 550N, whereas the fatigue limit of PM was determined as 350N.

Conclusion: MP prostheses demonstrated better biomechanical properties than PM prostheses. Accordingly, we recommend using MP prostheses especially because of their higher fatigue limit which will allow longer clinical lifespan.

Keywords: temporomandibular joint prostheses







OP-042

Alveolar Bone augmentation Using Khoury Technique: Report of Cases and Literature Review

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Objective: The long-term success of dental implants and implant-supported prostheses depends on the sufficient bone volume at the implant site. Autogenous bone remains the gold standard for bone augmentation because of its regenerative capacity. This case series aimed to evaluate the efficacy and safety of the Khoury technique in horizontal alveolar bone augmentation.

Case: Seven patients who required horizontal alveolar bone augmentation for dental implant placement were enrolled in this study. Horizontal bone augmentation was performed using a mandibular ramus graft fixed on the buccal aspect of the ridge using titanium screws and a particulate autogenous bone graft. Cone-beam computed tomography (CBCT) was performed before surgery and 4 months after surgery. The mean horizontal bone gain calculated from the CBCT scans was 4,35 mm.

Conclusion: The present case series demonstrates that the Khoury technique can be effective for horizontal bone augmentation prior to implant placement.

Keywords: Alveolar Ridge Augmentation, Khoury Technique, dental implant



OP-043 The Effect of Customized Healing Abutment on Emergence **Profile: Case Series**

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Purpose: The customized healing abutments are used for achieve aesthetics similar to natural teeth and gingiva in the soft tissues around the implant. This technique has some advantages such as the closest shape to the original contour of the tooth and gingiva in the cervical region. The purpose of this presentation is to evaluate the changes in the hard and soft tissues and the implant emergence profile in the 3rd month postoperatively in patients with a customized healing abutment.

Case series: 3 Patients are admitted to Erciyes University Faculty of Dentistry, Oral and Maxillofacial Surgery Department who had implants were evaluated. A customized healing abutment was made for implants which insertion torque is greater than 25 Newtons after surgery. Natural Emergence Profiler (NEP) silicone index was used to create the customized healing abutment. The soft and hard tissue changes, especially the exit profile are evaluated in patients who were given a customized healing abutment in 3 month postoperatively.

Result: In stock healing abutment applications, the emergence profile is circular due to the cylindrical shape of the healing head, that is away from the natural tooth emergence profile. This assesment showed that when the customized healing abutment were used the emergence profile has anatomical shape as a natural teeth and aesthetic resullts

Conclusion: A customized healing abutment allows to perform closest emergence profile to the natural teeth in dental implants.

Keywords: customized healing abutment, emergence profile







OP-044 Use of Platelet Derived Blood Concentrates in Oral and Maxillofacial Surgery

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Today, with the development of new technologies in the field of oral and maxillofacial surgery we can benefit from a variety of different biomaterials. Platelet rich concentration agents are obtained from the patient's autogenous blood. Various treatment approaches have been formed with the studies conducted in the applications of blood concentrates. Once reported to be effective in wound healing, use of these concentrates, has been increasing in recent years in oral and maxillofacial surgery. These concentrations provide angiogenesis, osteogenesis, fibroplasia and cell proliferation with the growth factors contained in it; due to this, they have an supportive role in wound healing and regeneration, which makes them preferable to use in other areas of dentistry such as endodontics and periodontology. Positive results have also been reported in many applications such as sinus lifting, bone augmentations, soft tissue applications, and wound healing after tooth extractions in oral surgery. In this presentation, we aim to describe the history, development and applications of platelet concentrations in the oral and maxillofacial surgery field.

Keywords: Platelet rich fibrin, growth factor, oral and maxillofacial surgery







OP-045

Evaluation of Pre- and Post-Surgical Photos with an Artificial Intelligence-Based Age Analysis Program in Patients Undergoing Orthognathic Surgery, Investigation of Social Appearance Anxiety and Psychological Well-Being

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Objective: We aimed to examine the effect of orthognathic surgery on facial rejuvenation by estimated ages of patients undergoing orthognathic surgery by comparing them with preoperative frontal plan photos and postoperative frontal plan photos obtained using an artificial intelligence-based age analysis program; and the effect of orthognathic surgery on social life and psychological well-being using a social appearance anxiety questionnaire and a psychological well-being scale.

Materials-Methods: In our study, 32 patients who were referred to Inönü University Faculty of Dentistry Department of Oral and Maxillofacial Surgery with diagnosis of dentofacial deformity and underwent bilateral sagittal split ramus osteotomy or Le Fort I osteotomy operations under general anesthesia or any of these operations between 2016-2022 were examined. Their estimated ages were determined with an artificial intelligence-based age analysis program by preoperative and postoperative frontal plan photos of the patients were examined.

Results: According to the results obtained, orthognathic surgery did not have a statistically significant effect on the estimated age of the patients. Facial rejuvenation over the age of one hundred was not statistically significant in the male gender and female gender. A statistically significant decrease in postoperative social appearance anxiety of patients was found. A statistically significant increase was found in the postoperative psychological well-being levels of patients undergoing orthognathic surgery.

Conclusion: When we examined the estimated age data obtained using the artificial intelligence-based age analysis program, it was seen that orthognathic surgery did not affect the estimated age, provided a decrease in the patients' social appearance anxiety level and increased psychological well-being.

Keywords: orthognathic surgery, artificial intelligence, age estimation





OP-046

Evaluation of the Effect of Different Bilateral Sagittal Ramus Osteotomy Techniques on Interference Between Proximal and Distal Bony Segments of Facial Asymmetry Patients

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Objective: In facial asymmetry, there may be condyle distortions because of the interferences between the proximal and distal segments. The present study aims to evaluate the amount of bony interferences between mandibular proximal and distal segments by using a virtual surgical planning software programme.

Materials-Methods: A retrospective chart review was conducted involving those who underwent mandibular orthognathic surgery and has virtual surgical planning software records. 12 patients were included in the present study. The same jaw movements of the virtual patients that were previously planned for the surgery, were simulated with four different osteotomy techniques. Dal Pont modification of sagittal split ramus osteotomy (SSRO), Hunsuck modification of SSRO, Posnick modification of SSRO and minimally invasive SSRO techniques were simulated for each patient on the virtual planning records. The volume of the interference between proximal and distal segments of the mandible and the angulation of the proximal segment due to these interferences were evaluated.

Results: Dal Pont modification of SSRO demonstrated the highest bony interference between the proximal and distal segments of the mandibles. All the other osteotomy modifications resulted in lower interferences, however only the differences between Dal Pont modification-Posnick modification (p:0.008) and Dal Pont modification-minimally invasive SSRO technique (p:0.019) were statistically significant.

Conclusion: In facial asymmetry, all surgical techniques were accompanied with bony interferences to some extent. To minimise this shortcoming, an osteotomy modification that minimizes the split area can be utilised.

Keywords: Facial asymmetry, sagittal split ramus osteotomy, lateral condylar sag







OP-047

Uncommon Peripheral Osteomas Causing Asymmetry in the Maxillofacial Region: Two Case Reports

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Objective: Osteomas are slow-growing benign bone lesions that can be compact or cancellous. Its etiology and pathogenesis are not known for certain. However, it is thought to be a true neoplasm, a developmental anomaly, or a reactive tissue growth resulting from trauma. Osteomas are divided into three groups as central, peripheral or extraskeletal. Although osteomas are usually seen in the craniofacial region, they rarely develop in the jaw bones.

Case: The first case, a 28-year-old female patient, applied to our clinic for the treatment of a mass that had been growing slowly for 4 years in the posterior region of the right mandible and caused asymmetry. Extraoral examination revealed an asymmetry in the right posterior region of the patient's mandible. In the intraoral examination, the mucosa on the mass was healthy and no ulceration was observed. In the physical examination performed in the area with asymmetry, a painless, hard, non-pulsative, motionless mass with a diameter of approximately 2*2*1 cm was detected. The second case, a 54-year-old female patient, applied to our clinic for the treatment of a mass that had been growing slowly for 5 years in the posterior region of the left maxilla. In both cases, as a result of clinical examination and radiographic examination, the mass, which was prediagnosed as osteoma, was completely excised with an intraoral approach under local anesthesia.

Conclusion: In conclusion, peripheral osteomas are rarely seen in the jaw bones. If these pathologies cause aesthetic and functional disorders as a result of their growth, surgical excision is required.

Keywords: Peripheral osteoma, Maxillofacial Region, Neoplasm







OP-048

Split rib bundle grafts mandibular reconstruction in patients with mandibular ameloblastomas: A case report

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Objective: Ameloblastoma is a bening but locally aggressive odontogenic tumour in the jaw. It is an asymptomatic, slow-growing tumour characterised by expansion and perforation of cortical bone and soft tissue infiltration. Management of ameloblastoma poses a challenge because successful treatment requires adequate resection and functional and aesthetically acceptable reconstruction of the residual defect. In these cases, to evaluate the efficacy of split rib grafts technique reconstruction of mandibular defects resulting from ameloblastoma.

Case:

Case 1: An 30-year-old female patient referred to our clinic with swelling and pain symptoms in the premolar-molar region of the right mandible. Segmental resection was performed. Two ribs were harvested from the right side of the chest, split into four halves and used to restore the continuity of the mandible.

Case 2: A 29-year-old female patient presented with the ameloblastoma in the posterior region of the mandible. Segmental resection of the posterior region was performed. Two ribs were harvested from the right side of the chest and used to restore the continuity of the mandible. The follow-up period and mouth opening is uneventful.

Conclusion: Although ameloblastoma is a common odontogenic tumour, the treatment of ameloblastoma is controversial. Restoration of function and an acceptable cosmetic result are the primary objectives of mandibular reconstruction defects resulting from ameloblastoma. Spit rip grafting is simple, safe, and can be effectively used to reconstruction long-span mandibular ameloblastom defects with minimal complications in selected patients.

Keywords: ameloblastoma, odontogenic tumors, rib grafts







OP-050 Comparison of Closed Reduction Methods in Mandible Fractures

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Objective: Mandibular fractures are the most common midface fractures. The first step in the treatment is to accurately reduce the fractured segments to their pre-trauma state. This process could be done in two ways, open reduction or closed reduction. The aim of this study is to compare the closed reduction methods as arch bar, orthodontic brackets and IMF screws.

Materials-Methods: The patients who applied with the complaint of mandibular fracture and treated in our department with closed reduction between 2006-2021 years were included in this study. Demographic data, clinical examination findings, diagnosis, treatment and follow-up information of the patients were obtained from patient files and surgical records.

Results: 58 patients were treated with the closed reduction. It was observed that arch bar was used in 32 patients, orthodontic brackets were used in 15 patients, and IMF screws were used in 11 patients. Average duration of the IMF was 5,44 weeks for the arch bar, 5 weeks for the orthodontic brackets and 4,91 weeks for IMF screws. According to the results of one-way analysis of variance, it was observed that the recovery time did not change according to the method used (p=0.332). There was no infection nor need for secondary surgical intervention in all patients.

Conclusion: The arch bar, orthodontic brackets and IMF screws could be used for closed reduction in mandible fractures succesfully., The choice of treatment method depends on the clinician's preference.

Keywords: mandible fractures, trauma, closed reduction







OP-051

Low Hemoglobin Levels Predict Increased Radiation-Induced Trismus Rates After Concurrent Chemoradiotherapy in Locally Advanced Nasopharyngeal Cancer Patients

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Objective: We retrospectively investigated the predictive significance of hemoglobin (Hb) values in predicting the incidence of radiation-induced trismus (RIT) in locally advanced nasopharyngeal carcinoma (LA-NPC) patients who received concurrent chemoradiotherapy (C-CRT).

Materials-Methods: Medical records of LA-NPC patients who underwent oral exams prior to and following C-CRT were examined. To confirm the presence of RIT, MMOs were measured both before and after C-CRT; RIT is defined as an MMO of <= 35 mm. All Hb values were derived from complete blood count tests obtained on the first day of C-CRT. The receiver operating characteristic (ROC) curve analysis was used to scrutinize a possible connection between pre-treatment Hb values and post-C-CRT RIT status.

Results: A total of 223 patients were eligible for the study. RIT was diagnosed in 46 (20.6%) of the total study cohort after a median follow-up of 52 months(8.3-151.2 months). The ideal Hb cutoff in ROC curve analysis that separated the patients into two groups was 12.05 g/dL [Area under the curve (AUC): 82.7%; sensitivity: 72.9%; and specificity: 71.3%]. RIT was significantly more prevalent in the Hb<=12g/dL group than in its Hb>12g/dL counterpart in comparative analysis (41.9% vs. 7.3%; HR: 6.87; P < 0.001). In multivariate analysis, Hb<=12, anemia, pre-C-CRT MMO < 41.4 mm, and MAD V58 Gy < 32% groups were found to be independently associated with significantly increased rates of RIT (P<0.05, for each).

Conclusion: Low pre-C-CRT Hb levels and anemia status are novel biological markers that independently predict higher RIT rates in LA-NPC undergoing radical C-CRT.

Keywords: hemoglobin, nasopharyngeal cancer, radiation-induced trismus







OP-052

The effect of exercise therapy in addition to drug therapy on pain and quality of life of patients with degenerative temporomandibular disorders

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Objective: A range of conservative therapy procedures are available for TMJ OA. The actual evidence for the efficacy of home physical exercises in TMJ OA is weak because of the very limited number of randomized clinical trials in literature. The aim of this study is to evaluate the effect of exercise therapy in addition to drug therapy on pain and quality of life of patients with TMJ OA.

Materials-Methods: Sixty patients who applied to our clinic with a complaint of pain in the TMJ region and who were diagnosed as degenerative TMJ disease according to DC/TMD was enrolled to the study. Two groups were created. Group 1 (n=30): Patients treated with NSAIDs (Oksamen® (Gensenta) 20 mg tablet, 1x1). Group 2 (n=30): Patients treated with NSAID (same as group 1) and home exercise program. The exercises were explained to the patients in the clinic and presented as a written plan for their regular practice at home. Patients checked at 4 and 8 weeks after the treatment, and their clinical findings recorded. Patient satisfaction questionnaire was applied to the patients before treatment, 4 th and 8 th week of the treatment.

Results: Statistically significant increase in MMO was observed in group 2, at 4 th week (P<.05). Statistically significant increase in patients' comfort and oral function were observed in group 2, at 8 th week.

Conclusion: Home exercise therapy in OA patients has positive effects on patient's comfort and jaw functions in the short term.

Keywords: Tmj Osteoartritis, Physical Therapy, Quality of Life





OP-053

Histopathological and Immunohistochemically Evaluation of The Effects of Selenium Used Before and After Tooth Extraction on Bisphosphonate Given Rats on Bone Healing

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Objective: The increasingly widespread use of bisphosphonates in the treatment of many diseases increases the incidence of medication related osteonecrosis in the jaw (MRONJ). The aim of this study was to investigate the effects of selenium administration on bone healing before or after tooth extraction in rats treated with bisphosphonate and tooth extraction.

Materials-Methods: The 48 male Wistar rats were divided into 4 groups (n=12); saline to group 1, zoledronic acid to group 2, 3 and 4; It was administered intraperitoneally at a dose of 0,06 mg/kg once a week for 5 weeks. At the end of five weeks, the mandibular left first and second molar teeth were extracted. Selenium, before tooth extraction in group 3 and after tooth extraction in group 4; it was administered intraperitoneally at a dose of 0,3 mg/kg once a day for 15 days. All rats were sacrificed at the end of the 4th week after tooth extraction. The specimens were evaluated histopathologically and immunohistochemically. The data were analyzed statistically.

Results: The results of the study showed statistically significant differences between the groups in terms of new bone area, necrotic bone area, fibrosis, new connective tissue formation, osteoblast count (p<0.05). The highest levels of new bone area, fibrosis, osteoblast count, and the least necrotic bone area level were observed in group 4. Additionally, the highest levels of new connective tissue formation were observed in group 3.

Conclusion: In conclusion, selenium has positive effects in the prevention of MRONJ.

Keywords: Bisphosphonate, Osteonecrosis, Selenium







OP-054

Effects of Systemic Probiotic Application on Bone Formation After Maxillary Sinus Lift Surgery in Rabbits With Experimental Osteoporosis

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Objective: Osteoporosis is a progressive metabolic bone disease characterized by deterioration of bone microarchitecture. Success of hard tissue augmentation in the alveolar crest is significally reduced in patients with osteoporosis. Recent studies show that, probiotics stop or slow down osteoporosis-induced bone destruction. Its effects on bone are to decrease osteoclastic activity or increase osteoblastic activity, depending on the type of probiotic. The purpose of this study is to determine the effect of probiotics on bone formation in subjects with or without osteoporosis whom undergone maxillary sinus floor elevation surgery.

Materials-Methods: Twenty four female New Zealand rabbits were randomly divided four groups with six rabbits each and bilateral MSFA was performed in each animal.

Group 1 (G1); Control group

Group 2 (G2); Given probiotics without osteoporosis,

Group 3 (G3); Osteoporotic, not given probiotics,

Group 4 (G4); Osteoporotic, given probiotics.

1 mg/kg methylprednisolone was administered intramuscularly every day for 6 weeks, starting approximately 2 weeks after the operation. Samples were examined 8 weeks after MSFE surgery with micro-CT and histologically.

Results: Bone Mineral Density was higher in the 2nd group compared to other groups. The difference between all parameters except Bone Volume (BV), Bone Volume over Total Volume (BV/TV) were significant between the 2nd and 3rd groups in the micro-CT measurements (p<0.05). Micro-CT and histological examinations in both groups were quite similar.

Conclusion: The quality of the bone formed with maxillary sinus floor elevation surgery was observed to be similar to the control group in osteoporotic patients supplemented with probiotics.

Keywords: Maxillary Sinus, Osteoporosis, Probiotics





OP-055

Mandibular Condylar Position Changes After Bilateral Sagittal Split Ramus Osteotomy in Patients with Class III Dentofacial Deformity

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Purpose: To evaluate the postoperative positional changes of mandibular condyle after bilateral sagittal split ramus osteotomy (BSSRO) with semi-rigid fixation via cone-beam computed tomography (CBCT).

Materials-Methods: A total of 23 patients who underwent Le Fort I and BSSRO with or without genioplasty due to Class III dentofacial deformity at the Erciyes University Oral and Maxillofacial Surgery Hospital from 2011 to 2017 were selected. The postoperative axial condylar angle and condylar position changes between the center of the condyle and glenoid fossa were assessed. Preoperative and postoperative 3D models were reconstructed from DICOM data by Mimics software. A plane (Midsagittal Reference Plane, MSR) that connects nasion and basion points and is perpendicular to the Frankfurt Horizontal Plane was created. The distance between MSR plane and condylion point (MSR-Co) was measured. In axial view, where the condyle had the largest mediolateral dimension, a line was drawn between the lateral and medial poles of each condyle, and angle between that line and MSR plane (condylar axis angle) was measured. Normally distributed data were analyzed with Paired-Samples T-test, and the others were analyzed with Wilcoxon Signed Rank Test.

Results: The difference in the right (p<0.001) and left (p<0.05) MSR-Co values between pre and post-operative CBCT evaluations were statistically significant. The right and left condylar axis angles were also significantly different (p<0.001).

Conclusion: This study showed that the condyle moved laterally in the glenoid fossa, and head of the condyle tilted medially after BSSRO in Class III dentofacial deformity.

Keywords: bilateral sagittal split osteotomy, class III deformity, condyle position







OP-056 The Effect of the Orthognathic Surgery On Hourglass Appearance of the Neck in Class III Patients

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Objective: In the frontal view, the transition from the neck's upper aspect to the mandible's inferior border has a slight hourglass appearance. This study aimed to evaluate the effect of gonial angle on the hourglass appearance of the neck in orthognathic surgery patients with Class III dentofacial deformity.

Materials & Methods: Twenty-two patients with Class III dentofacial deformity who underwent bilateral sagittal split osteotomy with Le Fort I osteotomy were included in this study. The gonial angle was measured on pre-and postoperative computed tomography images. The horizontal widening of the mandible was measured in the coronal plane. The neck concavity angle was measured on frontal photographs obtained preoperatively and at sixth months postoperatively. Statistical analysis of the differences between the pre-and postoperative measurements was performed.

Results: The gonial angle decreased, and the horizontal widening and neck concavity angles increased postoperatively. The decrease in the left gonial angle and the increase in the left horizontal widening angle was statistically significant (p=0.047, p=0.004). The decrease in the right gonial angle and the increases in the right horizontal widening angle and the increases in the right horizontal widening angle and the right/left neck concavity angles were insignificant.

Conclusions: The hourglass appearance of the neck concavity angle is affected by orthognathic surgery in class III dentofacial deformity patients. Therefore, neck aesthetics should also be considered in the preoperative surgery evaluation.

Keywords: Orthognathic surgery, Hourglass appearance, Neck aesthetics







OP-057 Needle Depth Optimization for Safe and Effective TMJ Arthrocentesis: An MRI Study

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Objective: This study aims to assess the optimal needle depths for double-puncture temporomandibular joint arthrocentesis in the Turkish population.

Materials-Methods: The MRI images of 132 patients were retrospectively analyzed to measure the distances from the skin to the medial and lateral joint capsules for both the anterior and posterior entry points for double-puncture arthrocentesis.

Results: : The study identified statistically significant gender-based differences in all measurements except for the condylar angle, with a weak correlation between age groups and the condylar angle. An inverse proportion was found between the condylar angle and other values, except for the anterior-lateral measurement. Furthermore, all measurements were directly proportional to each other. Females had a posterior-lateral mean distance of 14.8±2.9 mm, while males had 16.5±3.3 mm. Females had a posterior-medial distance of 26.6±4.2 mm, while males had 29±5.3 mm. Anterior-lateral measurements were 13.9±3.1 mm in females and 15.2±3.3 mm in males, and anterior-medial measurements were 25.6±4.5 mm in females and 27.2±5.0 mm in males.

Conclusion: The study provides valuable information on the anatomical landmarks for the safe and effective use of the double-puncture technique in temporomandibular joint arthrocentesis in the Turkish population. The findings can serve as a useful guide for clinicians performing this procedure.

Keywords: arthrocentesis, needle depth, temporomandibular joint







OP-058 Experimental Evaluation of Effects of Ankaferd Blood Stopper on Grafting Bone Defects in Rats Administered Rivaroxaban

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Objective: The aim of our study is to evaluate effects of rivaroxaban on bone defects healing, bone graft healing and interaction with Ankaferd Blood Stopper histopathologically.

Materials-Methods: 24 male Wistar Albino rats were randomly divided into six groups. Three group received rivaroxaban and the other three received sterile saline by oral gavage method once a day for six weeks preoperatively and four weeks postoperatively totally ten weeks. According to experiment groups, defects rinsed with sterile saline (SS) and left blank and filled with bone graft (BG) or bone graft with Ankaferd Blood Stopper (ABS). After four weeks healing period all rats were sacrificed and calvarial bones were excised. The specimens were histopathologically and histomorphometrically evaluated.

Results: There is no necrosis or foreign body reaction in any specimen. A significant difference was found between groups in terms of new bone formation, fibrosis and healing score. Histomorphometrically, between RXB(+)/SS groups and RXB(-)/SS groups, there was significantly difference in new bone formation (P= 0.000). A comparison of the healing score of the RXB(+)/SS group with RXB(-)/SS group showed no statistically significant difference (P = Nc). Between the RXB(-)/BG/ABS group and RXB(-)/BG group, there was statistically significant difference for healing score (P=.046) but not for new bone formation (P= 1.000).

Conclusion: The results of this study show that rivaroxaban has no negative effect on bone healing and Ankaferd Blood Stopper may enhance healing process but not new bone formation.

Keywords: Ankaferd Blood Stopper, Bone Healing, Rivaroxaban







OP-059

The effect of preemptive intravenous ibuprofen on postoperative pain control in temporomandibular joint arthrocentesis

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Objective: Preemptive analgesia is an anti-nociceptive treatment method used to prevent postoperative pain. This study investigated the effect of preemptive intravenous ibuprofen administration on intraoperative and postoperative pain during temporomandibular joint arthrocentesis performed under local anesthesia.

Materials-Methods: This controlled, double-blind randomized clinical trial was performed on patients treated with temporomandibular joint arthrocentesis. Patients included in the study were randomly assigned to the ibuprofen and placebo groups. All patients were asked to mark their pain intensity on the VAS scale at certain time intervals from the post-operative 2nd hour to the 3rd month. Demographic characteristics of the patients and preoperative TMJ examination findings were statistically evaluated.

Results: A total of 26 patients were evaluated in the ibuprofen (n = 10) and placebo groups (n = 16). The mean pain score in the placebo group was significantly higher from the 4th hour to the 7th day compared to the ibuprofen group (p < 0.05). However, there was no significant difference in VAS scores between the two groups immediately after the procedure, at the 2nd hour, and between the 2nd week and 3rd month. In the patients included in the study, mouth opening increased significantly immediately after the arthrocentesis and in the 3rd month, but there was no significant difference between the two groups. In the early postoperative period, patient satisfaction was higher in the ibuprofen group.

Conclusion: The results of the study showed that preemptive intravenous ibuprofen administration in temporomandibular joint arthrocentesis reduces postoperative pain and increases patient satisfaction in the early period.

Keywords: preemptive intravenous ibuprofen, temporomandibular joint, arthrocentesis







OP-060 The Effect of Interpositional Bone Grafting with Cancellous Allograft (Femur Head) in Orthognathic Surgery

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Objective: Orthognathic surgery has become routine clinical practice worldwide for the treatment of dentomaxillofacial deformities. As the number and size of continuity defects between segments increase, the stability of the segments may decrease and in this case, postoperative complications such as nonunion, malunion, recurrence, soft tissue ingrowth and deterioration of the aesthetic appearance of soft tissues may increase. Hence, bone grafting at the osteotomy site in orthognathic surgery has been performed to overcome these adverse effects. Various interpositional grafting materials have been advocated to allow for successful early healing and to maintain the repositioned segments. In this case series, we preferred to use allograft instead of autogenous bone graft to avoid donor site morbidity.

Case: Four bone gaps were grafted with Atident allograft block obtained from living donors. This graft was obtained from the femoral heads of the bones obtained after total or partial hip arthroplasty by lyophilization method.CBCT was taken preoperatively and 6-12 months after surgery from 3 patients and 4 grafted gap location were evaluated.

Conclusion: Stable aesthetic and functional results were observed in all cases. No infection occurred, and stable bone continuity was observed clinically and radiologically. In cases where there are inevitably large bone gap between bone segments in orthognathic surgery, cancellous allograft bone blocks from living donors femural head can play a positive role in the stable healing of segments and the prevention of postoperative complications such as delayed healing. Cancellous Allograft bone blocks can be an alternative to corticocancellous allografts.

Keywords: Allograft, Interpositional grafting, orthognathic surgery







OP-061 Managing the Unpredictable: Malignant Hyperthermia in Orthognathic Surgery

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Objective: Malignant hyperthermia is a rare but potentially life-threatening medical condition that presents as a hypermetabolic response to potent volatile anesthetic agents and/or succinylcholine. This case report describes the management of malignant hyperthermia that occurred during orthognathic surgery.

Case: A seventeen-year-old male patient was referred to our clinic with a complaint of malocclusion and difficulty in speeching. After clinical and radiological examination, surgically assisted rapid maxillary expansion (SARME) was planned as a first-stage treatment. After consultation with orthodontics, SARME was performed under sedation without any surgical or anesthetic complication. According to clinical and radiological evaluation after one year, double jaw surgery and genioplasty were planned to correct the skeletal relationship. During orthognathic surgery, the patient developed malignant hyperthermia symptoms, such as sudden and severe muscle spasms, high fever, increased heart rate, and respiratory distress. After early diagnosis and complete management, the patient fully recovered, and surgery was reattempted under total intravenous anesthesia. This operation was uneventful.

Conclusion: The mortality from malignant hyperthermia is high, and identification of susceptible patients, early diagnosis, and specific treatment with dantrolene sodium are crucial to survival. Although malignant hyperthermia is unlikely to occur, oral and maxillofacial surgeons must thoroughly understand and manage this complication.

Keywords: general anesthesia, malignant hyperthermia, orthognathic surgery







OP-062 Different treatment strategies for Goldenhar Syndrome

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Objective: Goldenhar syndrome (GHS) is a rare congenital disease characterized by mandibular hypoplasia, abnormality of the ear, dermoid limbal, vertebral disorders and hemifacial microsomia. Treatment protocol depends on the patient's age, sypmtoms and systemic condition. The aim of this cases report is to present treatment results of four GHS patients.

Case: The first patient, 5-years-old female with a defect in the right mandibular ramus and corpus. In the first surgery, costochondral grafting was performed by using microplates. The plates were removed in the second surgery after (*) months. The second patient, 5-years-old female, has multilocular defect involving the zygoma, condyle, and ramus in the left side, and also cleft lip and palate. The patient had a history of cleft lip and palate surgery in a different center. Zygoma and condyle reconstruction were achieved by costochondral grafting. Third patient, 1,5-years-old male, has bilateral ramus and corpus defects and also partial ocular defect. Bilateral costochondral grafting was performed in this patient. The fourth patient, a 13-year-old male, has a defect in the left condyle, mandibular ramus, zygoma and skin tags. He had also limited mouth opening because of temporo-mandibular joint ankylosis on the left side. Bimaxillary costochondral grafting, placement of temporomandibulary joint prosthesis and otoplasty were performed for treatment of patient.

Conclusion: Costochondral grafting can be used as a well treatment alternative for the patients of Goldenhar Syndrome before maturation.

Keywords: Costochondral graft, Goldenhar Syndrome, Hemifacial Microsomia







OP-063 Evaluation of the Effect of Different Anesthesia Techniques on Ocular Structures with Optical Coherence Tomography

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Objective: The aim of our research is to evaluate the effects of different dental anesthesia techniques routinely applied in the dentistry clinic by measuring the thickness of the choroidal layer and blood circulation in the retinal layer using optical coherence tomography (OCT) and Optical Coherence Tomography Angiography (OCTA).

Materials-Methods: 80 patients between the ages of 18 and 50 were included in our study. According to the anesthesia method to be applied to the patients; They were divided into 4 groups as Inferior Alveolar (n=20), Tuber (PSA) (n=20), Supraperiosteal Infiltration (n=20), Infraorbital (n=20) Anesthesia. Choroidal thickness and superficial vascular densities were measured by evaluating the OCTA and OCT images of the patients taken with the Topcon Swept Source OCT-Angiography, DRI OCT Triton (Topcon Co, Japan) device. The same structures were evaluated with OCTA and OCT 30 minutes after anesthesia.

Results: The mean age of 80 patients participating in the study was 24.53 ± 7.01 . A total of 42 male and 38 female patients participated. When the changes in the choroidal thickness of the patients were examined according to the groups before and after anesthesia, there was no interaction effect of time (before-after anesthesia), group and group*anesthesia in the patients' choroidal thickness (p=0.840),(p=0.476). Therefore, choroidal thickness did not change before and after anesthesia. In addition, there was no statistically significant difference between the groups in terms of choroidal thickness (p=0.838).

Conclusion: Anesthesia performed with negative aspiration does not cause complications in the eye if there is no anatomical variation.

Keywords: local anesthesia, ocular complications, Optic Coherence Tomography(OCT)







OP-064 A Rare but Dangerous Disorder: Brugada Syndrome

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Objective: Voltage-gated sodium channels function in initiation and propagation of electrical activity and related action potentials in the heart. Brugada Syndrome (BS), is associated with increased risk of polymorphic ventricular tachycardia and sudden cardiac death due to loss of sodium channel function. Due to the mechanism of action of local anesthetics through sodium channel blockade, their use in BS, may lead severe complications. Although BS is rare, it should not be missed in dental treatments where local anesthetic drugs are widely used.

Case:

Case 1: 42 year-old male patient with BS was referred for drainage of abscess. Colsultant cardiology doctor recommended to perform the procedure by avoiding local anesthetics with hemodynamic monitoring. General anesthesia was therefore planned and no local anesthesia was administered intraoperatively.

Case 2: 33 year-old female patient was admitted to our clinic for extraction of an impacted 3rd molar with pericoronitis. The patient was diagnosed with BS and had no history of syncope. She had received dental treatment with local anesthetic once before. Cardiology consultation recommended the use of minimal local anesthesia with hemodynamic monitoring. After monitoring the patient, local anesthesia was obtained by administering articaine (80mg). No complications were observed in both patients.

Conclusion: In patients with BS, as well as a detailed anamnesis, cardiology consultation is also crucial. Following a patient-specific treatment planning, the patient should be monitored hemodynamically during the treatment and local anesthetic agents should be avoided if possible.

Keywords: Brugada, local anesthesia, sodium channels







OP-065 Open Reduction Treatment of Mandibular Condyle Fracture: Case Report

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Objective: The mandible is one of the most fractured bones among the maxillofacial bones. The condylar process of the mandible is the most common fracture type resulting from direct trauma to the chin. Injuries occurring in the mandibular condyle and joint region need to be treated correctly, as vital functions are affected. It has been reported that open reduction is indicated when the condylar fragment is displaced medially.

Case: A 19-year-old male patient presented to our clinic with pain in front of the left ear. The patient's history revealed that he had been struck a week earlier. Clinical examination showed limited mouth opening, malocclusion, and pain. Radiographic imaging revealed a medially displaced fracture of the left condyle head. The patient was decided to be treated with open reduction under general anesthesia. A preauricular approach was chosen to access the operative site. During surgery, occlusion was restored to its original pre-fracture state, and stabilized with intermaxillary fixation (IMF) screws. After repositioning the medially displaced condyle, the fragments were fixed using mini plates and screws. In the postoperative follow-up, mouth opening was normal and occlusion was satisfactory.

Conclusion: One of the most preferred methods in the rigid internal fixation of subcondylar fractures with mini plate/screw systems is the application of a single plate placed vertically parallel to the long axis of the condyle. The most preferred extraoral approach for treating high-level condyle fractures with open reduction is the preauricular approach. The patient is still being followed up.

Keywords: condyle, open reduction, trauma







OP-066 The Influence of the Hourglass Form of the Neck on Perceptions of Frontal Aesthetics

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Objective: The purpose of this investigation was to evaluate the effect of the neck concavity angle (NCA) on different occupational groups' perceptions of frontal aesthetics.

Materials-Methods: An online survey was developed using Google Forms and sent to the observers via WhatsApp. Male and female frontal silhouettes were created and NCAs that comprise the hourglass form of the neck were altered in 5° increments from 120° to 170°. Observers were asked to score the images using 0-10 numerical rating scale.

Results: 279 observers (97 orthodontists, 92 oral-maxillofacial surgeons, 90 laypeople) participated in this study. For male and female silhouettes, an NCA of 145° was perceived as the most aesthetic, while an NCA of 170° was perceived as the least aesthetic by all groups. Generally, an NCA greater than 145° was perceived as less aesthetic than an NCA smaller than 145°. There was no significant difference between the scores of the groups for the silhouettes except female silhouettes with an NCA of 125° or 150° and male silhouettes with an NCA of 145° or 150°.

Conclusion: For female and male silhouettes, the further the NCA increased or decreased from 145°, the less aesthetic it was perceived to be. A significant increase in NCA was perceived as less aesthetic than a significant decrease. The range of NCAs perceived as aesthetic varied between 120° and 145° for women, and between 130° and 150° for men. These ranges of variability of NCA may provide clinicians with useful information for orthognathic surgical planning.

Keywords: Aesthetic Perception; Frontal View; Neck Aesthetics; Orthognathic Surgery






OP-067 A recurrent reactive periost lesion turning into a rare malignancy; a case report

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Periosteal osteosarcoma is a rare primary malignant bone tumor and a subtype of juxtacortical osteosarcoma. We present a case who started with a reactive gingival lesion turning into a bone sarcoma, a 35 year old man. He was referred with recurrence of a slow growing mass involving the posterior mandible. Medical history revealed he had been operated 1 year ago for gingival swelling at the same site and reactive periostitis ossificans was the histopathologic diagnosis. Intraorally, the gingival mass occupying the buccal aspect of the posterior mandible, was sessile with white-red spots on its surface. Since our CBCT imaging showed no bone involvement, an excisional biopsy of the lobulated gingival tissue including the periosteum were performed. Histopathology reported as reactive periostitis ossificans supporting the previous diagnosis. He didn't come to follow-up appointments because of the new corona virus pandemic. Two years later, he came with difficulty in chewing because of a bony mass on the lingual aspect of the posterior mandible with gingival tears. CBCT showed a lobulated well-defined surface lesion without medullary involvement and intact cortical bone. Using a sharp osteotome we were able to separate the lesion grossly from the lingual aspect of the mandible. Histopathology revealed that things have gotten way much worse since the previous biopsy; periosteal osteosarcoma was the final diagnosis. He underwent resection surgery, one and a half year follow-up showed no evidence of recurrence. This case will be the first in the literature; a periosteal osteosarcoma arising from periostitis ossificans.

Keywords: Periosteal osteosarcoma







OP-068 Can calcium phosphate be used as a model material in evaluation of implant stability?

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Objective: The aim of this study was to evaluate the use of calcium phosphate graft material as an implant model.

Materials-Methods: This prospective, single-blind, model study was carried out in Van Yüzüncü Yıl University Faculty of Dentistry, Oral and Maxillofacial Surgery clinic in February 2023. The graft containing calcium phosphate as the model material was mixed and poured into pre-prepared molds. Randomly, 2 molds in Group 1 were left for 1 hour, and 2 molds in Group 2 for 12 hours for the graft to harden. 5 cc grafts were used for each mold and a total of 20 cc grafts were used. For the placement of implants in both groups 24 implant sockets were created in Group 1 and 24 implant sockets in Group 2. 3.5x8 mm implants were placed in each slot in the models with a manual ratchet with torque values.

Results: The results were evaluated at the 95% confidence interval and the significance level of p<0.05. Drilling times of the implant sockets in the 12 hours model group were found to be statistically significantly higher than those in the 1 hour model group (p<0.01). Implant placement torques in the implant sockets in the 12 hours model group were found to be statistically significantly higher than those in the 1 hour model group were found to be statistically significantly higher than those in the 1 hour model group (p<0.01).

Conclusion: In this study, it was revealed that calcium phosphate can be used as a model material for the evaluation of implant stability in in vitro implant studies.

Keywords: calcium phosphate, dental implant, bone model







OP-069

Ensuring Function and Aesthetics with Orthognathic Surgery and Dental Implant in Patients with Skeletal Deformity: Case Series

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In this case series, we aim to highlight the capacity of orthognathic surgery and dental implants to maximize both function and aesthetics for those with partial tooth deficiency and skeletal issues. In cases with dentofacial deformity and multiple tooth deficiency, providing ideal aesthetics and function is quite complicated. For the treatment of such cases, orthognathic surgery can be used to restore the jaws to their ideal location, followed by dental implants for stabilization. Determining the ideal position of the jaws and ensuring the stability of occlusion after bilateral sagittal split osteotomy is quite difficult, especially in patients with posterior tooth deficiency. 3 Patients will be presented in this case series. The patients are Class III patients whose orthognathic surgery was performed at Marmara University Faculty of Dentistry Oral and Maxillofacial Surgery between 2019-2022. Implants were made in two of the patients before the operation, and surgical splints suitable for temporary prosthetic restorations were prepared. In the other patient, a removable partial prosthesis was made before the operation, and the splint was prepared accordingly. After the recovery, the patient with a partial prosthesis had dental implants and a permanent prosthesis; the other two had a permanent prosthesis. Consequently, it has been demonstrated that the treatment provided in this case series enhances the patient's aesthetic and functional quality of life. In order to prove the results we have obtained, it is necessary to increase the number of patients and confirm them with clinical trials with a longer follow-up period.

Keywords: Orthognathic Surgery, Dental Implant, Occlusion







OP-070 Treatment of Large Dentigerous Cyst in Pediatric Patient: A Case Report

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Objective: Dentigerous cysts are odontogenic cysts that are associated with the crowns of permanent teeth. They are the most common cysts of the jaws after radicular cysts. They are usually detected on routine dental radiographs and do not cause pain or other discomfort unless they are secondarily infected. Marsupialization and enucleation are the main surgical treatment methods of dentigerous cysts. In this case report, a large dentigerous cyst treated with enucleation is presented.

Case: A 11-year-old female patient applied to our clinic for routine examination. In the radiological examination, an asymptomatic and large cystic lesion associated with the crown of the patient's left lower wisdom tooth was detected. Considering the possibility of the patient not being motivated for marsupialization treatment due to her age, the lesion was taken under general anesthesia in a single session. Dentigerous cyst was found as a result of pathology. With the periodic radiographs taken, the healing process of the cystic cavity was observed. Approximately 6 months after the treatment of the cystic lesion with enucleation, radiography shows that the entire defect has healed with bone formation.

Conclusion: In the surgical treatment of dentigerous cyst cases, marsupialization and enucleation techniques can be used. The treatment method to be chosen can be decided according to the profit and loss ratio. In this case, enucleation therapy was preferred and the patient was successfully treated.

Keywords: Dentigerous cyst, enucleation, marsupialization







OP-071

Preventive Effects Of Enamel Matrix Derivative On The Development Of Medication- Related Osteonecrosis Of The Jaws

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Objective: Medication-related Osteonecrosis of the Jaw(MRONJ) is a frequently encountered progressive disease, which results in significant deterioration in oral functions. Prevention of mronj is still a controversial issue. The aim of this study is to investigate the preventive effect of local enamel matrix derivative (EMD) application into the extraction sockets to reduce development of MRONJ.

Materials-Methods: Forty-five female wistar rats were randomly divided into 3 groups (Group 1: control), Group 2: biphosfonate) and Group 3: EMD). Intraperitoneal 0.1 mg/kg zoledronic acid administration was applied to 30 rats in Group 2 and 3, three times a week for eight weeks, then the left mandibular first and second molars were extracted. After tooth extraction, SF-soaked collagen sponge was placed in the extraction sockets in Group 1 and 2, and 0,2 ml (30 mg/ml) EMD-impregnated collagen sponge was placed in group 3. After eight-weeks, all rats were sacrificed and clinical, histological and radiological examinations with micro-CT were performed.

Results: In the clinical examination of the soft tissue healing of the extraction sockets, it was seen that all sockets healed uneventfully in group 1 and more soft tissue healing was observed in group 3 than group 2. In micro CT examination, bone healing indicators BMD(Bonemineraldensity), BV(bonevolume), TV(tissuevolume), BV/TV(percentbonevolume), TbTh(Trabeculerthicnes), TbN(Trabeculernumber), were found to be statistically higher in Group 3 than group 2 (p<0.05).

Conclusion: Local EMD application in the extraction sockets has positive effects for prevention of MRONJ and it could be used to enhance soft and bone tissue healing.

Keywords: EMD, Osteonecrosis, Jaw







OP-072 New approach in marsupialization treatment of odontogenic cysts

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Abstract: Odontogenic cysts are epithelial-lined pathologic cavities and surrounded by fibrous connective tissue that originate from odontogenic tissues that occur in tooth-bearing regions of maxilla and mandible. Cystic conditions of the jaw cause bony destruction and may cause resorption or displacement of adjacent teeth. Odontogenic cysts have developmental or inflammatory origins. More cases have been published in the adult age group than the pediatric population. Periapical cyst and dentigerous cysts are frequently reported conditions in dental practice. Histopathologic examination remains the gold standard investigation. Odontogenic cysts are managed with enucleation or marsupialization procedures. This article presents the treatment of the odontogenic cyst of a 9-year-old female and a 52-year-old male with the marsupialization method. The aim of this paper is to demonstrate a new approach to the marsupialization treatment of odontogenic cysts. As a new method, a tube-shaped apparatus fixed to the night plate was used. This method has advantages such as being more stable, ease of use, being hygienic and using the appliance as a space maintainer.

Keywords: odontogenic cyst, marsupialization, new method







OP-073

Pulmonary Embolism Of Obstructive Sleep Apnea Patient After Orthognathic Surgery: Case Report And A Review Of The Literature

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Objective: Obstructive sleep apnea (OSA) is a sleep-related breathing disorder described as repetitive upper airway obstructions during sleep. Pulmonary embolism (PE) is a type of venous thromboembolism described as obstruction of the pulmonary arteries by an embolus that can result in morbidity and mortality. PE can be provoked by surgery such as orthognathic surgery and immobilization. Recent studies have shown that particularly moderate-severe OSA is a risk factor for recurrent and high-risk PE.

Case: 26-year-old male patient who underwent bimaxillary surgery with genioplasty under general anesthesia to treat severe OSA and dentofacial deformity. Immediately after extubation, negative pressure pulmonary edema was developed. After the reintubation, the patient was admitted to the intensive care unit for two days. On the sixth postoperative day, PE presented with coughing and sharp pain throughout anteroposteriorly on a specific point on the lower left side of his chest accompanied by pain and rigidity on his right lower extremity. The patient was then admitted to inpatient service for anticoagulant therapy

Conclusion: Although orthognathic surgery is considered a safe procedure, OSA patients should be regarded as at thromboembolism risk regardless of age and overall health.

Keywords: Pulmonary embolism, sleep apnea, dentofacial deformities







OP-074

Temporomandibular Joint Subluxation Management of Three Patients With Minimal Invasive Approaches

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Objective: Temporomandibular joint (TMJ) subluxation can be defined as the excessive movement of the condyle head anterior to the articular eminence during jaw opening, which can be spontaneously reduced to the glenoid fossa. Numerous conservative methods have been described for the treatment of TMJ hypermobility. Prolotherapy, also known as "regenerative injection therapy" is used for repairing and enhancing tendon, ligament, and joint capsule by stimulating the proliferation of collagen to promote soft tissue repair and reduce pain. The regenerative potential of Platelet-rich plasma (PRP) has been explored in the last two decades and it's been widely used in maxillofacial surgery. Lastly, autologous blood injection is another method to reduce mandibular movement via fibrosis. The aim of the case reports was to present the management of three patients with minimal invasive methods diagnosed as TMJ subluxation.

Case: Three patients diagnosed with TMJ subluxation underwent to the injection therapy with PRP, dekstroz and autologous blood, respectively. Restriction of the mandible movement was applied with a head band for two weeks. Paracetamol derivatives were allowed as a painkiller. A patient showed a complete healing with a single dose. At first, two of them showed acceptable progress in the short term and then, a partial relaps was observed. All patients are in the follow up period.

Conclusion: All treatment procedures were efficient in improvement of clinical symptoms related to TMJ hyper- mobility. Based on the literature, there have no been any evidence showed superiority of any minimal invasive approaches in the management of TMJ subluxation.

Keywords: PRP, Subluxation, TMJ





OP-075

Bone grafting and insertion of dental implants followed by orthognathic surgery for correction of severely skeletal deformity in young patient. A case report

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Objective: Atrophy can be seen in the jaws due to tooth extraction at an early age. The severely atrophy of the jaws often complicates ideally oral reconstruction of esthetics and functionality, and necessitates different preprosthetic surgeries including bone grafting, orthosurgery, and implant insertion. This report describes the management of a multiple missing teeth case by implant insertion with iliac bone grafting before orthognathic surgery.

Case: In 2021 a 29-year-old male patient referred to Erciyes Üniversity Faculty of Dentistry Departmant Of Maxillofacial Surgery claiming for esthetic and functional oral rehabilitation. No remarkable finding was identified in his medical history. The patient had multiple missing teeth. In addition, midfacial soft tissue collapse due to the maxillary retrusion and a class III jaw relationship were detected. Implants were placed after iliac graft was performed to the maxillary retrusion. Then, bimaxillary orthognathic surgery was performed for maxillary retrusion.

Conclusion: In patients with atrophic jaws, a combination of the iliac onlay bone graft and dental implants can result in satisfactory reconstruction and reliable long-term prognosis. Bimaxillary orthognathic surgery combined with iliac grafting augmentation of atrophic jaws is an efficient method to obtain better aesthetic outcome for patients with severe concave profile. Atrophic jaws augmentation with iliac bone block grafting is a adequate technique to ensure favorable soft tissue support and esthetic appearance of the patient.

Keywords: iliac graft, orthognathic surgery







OP-076 Clear Aligners Combined with Orthognathic Surgery: Our Experience

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Objective: Orthodontic treatment combined with orthognathic surgery is frequently necessary to effectively manage patients suffering from severe craniofacial deformities. During conventional orthodontic treatment metal braces are used which are not complied well due to their unaesthetic appearance. Due to the increasing aesthetic demands of orthodontic treatment patients, clear aligner systems were introduced to the market. This presentation describes the cases of patients undergoing orthognathic surgery who underwent pre- and post-operative orthodontic treatment with a clear aligner system, thereby highlighting the steps, advantages, disadvantages, and challenges of the combined orthodontic and orthognathic treatment using this alignment system relatives to a conventional system.

Case: The most important difference between these two approaches is the intraoperative challenges during intermaxillary fixation(IMF). Conventional orthodontic appliances usually facilitate this fixation with crimpable hooks or pre-bended surgical archwires. However, a different approach is required for the clear aligner patient. In our clinical practise we routinely use IMF screws for intraoperative IMF of clear aligner patients. The number and the position of IMF screws depend on the post-operative elastic need and dentition of the patient. Complications related to IMF screws should be kept in mind and informed consent should include these risks.

Conclusion: According to our clinical experiences complex multiple-jaw orthognathic procedures can be successfully performed in Invisalign patients. Since clear aligners provide an aesthetic, removable appliance and may be more acceptable to patients than conventional orthodontic appliances, using clear aligners in orthognathic surgery is a promising alternative to traditional orthodontics.

Keywords: Clear Aligners, Intermaxillar fixation, Orthognathic Surgery





OP-077

Non Surgical Management of Aggressive Giant Cell Granuloma of the Mandible with Denosumab: 3 Cases

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Objective: Central Giant cell granulomas (CGCG) are benign intraosseous tumors of the mandible and account for approximately 7% of all benign tumors of the jaws. Clinically, giant cell granulomas are characterized as painless and slow-growing lesions. Pain, numbness, and swelling in the affected area and malocclusion can be observed. Histologically, giant cell granuloma of bone is composed of neoplastic ovoid mononuclear cells with high RANKL expression and a randomly distributed population of large RANK-expressing osteoclast-like giant cells. Because the giant cells in CGCG are osteoclasts, the progression of the lesion can be obstructed by inhibition of RANKL.

The treatment mainly consists of surgical curettage or resection; however, surgical morbidity and recurrence are the disadvantages. Different non-surgical treatment alternatives exist, such as bisphosphonates, Denosumab, and steroid injections. It has been seen that Denosumab is a successful treatment option in patients, especially in pediatrics and large-scale CGCG in adults, according to the literature. Surgical treatment in pediatric patients affects the tooth buds and the jaws' growth and development.

This presentation aims to show the successful recovery of 3 patients who underwent systemic Denosumab as a treatment alternative.

Case: Three patients who received subcutaneously Denosumab were followed up, and it was observed that there was adequate bone formation occurred. It was observed that the treatment succeeded in the 6-month follow-up of two patients and the 3-year follow-up of the third patient.

Conclusion: Denosumab in CGCG is an effective treatment option to avoid surgery, especially in pediatric and large-scale CGCG in adults.

Keywords: Central giant cell granuloma, pathology, denosumab







OP-078 The Effect of Dental and Skeletal Condition on Athlete Performance in Active Athletes

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Introduction: Oral health, though overlooked, is an integral part of athlete health. Previous research has shown that oral health in elite or professional athletes is not better than in socioculturally underprivileged populations who do not exercise. In this study, it was aimed to investigate the effects of oral health status, presence of acute or chronic infection in the mouth, night or day clenching habits and skeletal differences on sports performance in individuals between the ages of 18-28 who do active sports.

Methods: This cross-sectional study was conducted with the participation of 396 individuals between the ages of 18-28 who are actively engaged in sports.

Percentage and frequency methods were used to determine the distribution of personal information of the participants. The standard deviation and arithmetic mean for the gender variable of the participants, the T test for independent samples, since the parametric assumptions were fulfilled, the ANOVA Post-Hoc (Tukey) test were used in the analysis of the differences and the level of significance was specified as 0.05.

Results: It was determined that the incidence of bruxism was higher in athletes, there was no significant relationship between athlete performance and bruxism, skeletal jaw relationship and infection, however the athletes with a Decay-Missing-Filled-Total (DMFT) score of <4 achieved more successful and significant results in all performance tests than those with a >4 score.

Conclusions: It has been determined in our study that there is a serious relationship between oral health and athlete performance.

Keywords: Bruxism, Dmft, Sports







OP-079 A Case of "Brown Tumor" Associated with Parathyroid Adenoma

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Objective: Hyperparathyroidism, is an endocrine disorder characterized by elevated secretion of parathyroid hormone, which can result in imbalanced osteoclast activity. Brown tumors of hyperparathyroidism are lesions that result from abnormal bone metabolism in primary, secondary or tertiary hyperparathyroidism. The incidence of brown tumors of hyperparathyroidism range from 1.5% to 3% and is frequently seen in young women. The aim of this case report is to explain the approach to the brown tumor case, which causes severe deformation, aesthetic and functional loss in the maxilla and mandible due to primary adenoma.

Case: A 21-years-old female patient was admitted to our clinic with the complaints of a mass with expansive spread and rapid growth in the mandible and right maxillary region. As a result of radiographic examinations, local lytic areas were detected in the patient, and it was determined that she had paresthesia complaints on the lip,chin and face about 3 months ago. Giant cell granuloma diagnosis was confirmed after incisional biopsy. The patient was diagnosed with parathyroid adenoma by consulting the endocrinology because of the high level of parathorman as a result of the blood samples. Following the parathyroidectomy, the patient's complaints and the lesions decreased. Periodic controls are made for the possible surgical need of the patient whose deformity continues.

Conclusion: When the diagnosis of central giant cell granuloma is confirmed, the level of parathormone should be investigated and the treatment need of the case should be evaluated in cooperation with endocrinology when necessary. In patients who respond inadequately to conservative treatment or parathyroidectomy, deformations in the jaws can be treated surgically. In addition, intralesional steroid injection is among the options for the treatment of lesions.

Keywords: brown tumor, parathyroid adenoma, hyperparathyroidism







OP-080 Compound Odontoma: 2 Case Reports

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Objective: To inform clinicians about compound odontoma cases.

Case1: A 27-year-old female patient was admitted to our clinic with a history of recurrence of her complaints after a pathology was removed 7 years ago. The presence of the pathology was observed on the panoramic x-ray and a preliminary diagnosis of compound odontoma was made. After the completion of the treatment plans, it was excised under general anesthesia and completed with a successful surgery. The pathology report confirmed the diagnosis of compaund odontoma. In the post operative period, it was observed that the symptoms of parasthesia, swelling and pain were resolved.

Case2: Another patient, an 18-year-old female patient, was admitted to our clinic with a preliminary diagnosis of compaund odontoma in the mandibular premolar region based on necessary imaging modalities. She was successfully treated with surgical excision under local anesthesia.

Conclusion: Discussion: Although there are researchers who recommend follow-up of odontomas unless they are symptomatic, the general opinion is that odontomas should be excised.

Keywords: benign tumour, excision, odontoma







OP-081 Evaluation of the Effect of Concentrated Growth Factor Placed in the Tooth Extraction Socket on Soft Tissue Healing

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Objective: Platelet extracts such as Platelet-rich plasma (PRP), platelet-rich fibrin (PRF) and concentrated growth factor (CGF), which enable the secretion of many growth factors obtained from the patient's blood, provide faster healing of the wound. The effects of growth factors secreted from platelets to increase the healing of bone and soft tissue have been shown in many studies. CGF developed by Sacco has higher tensile strength and higher viscosity than other platelet concentrates. The aim of this study is to examine the effect of CGF on soft tissue healing after impacted third molar extractions.

Materials-Methods: In this study, patients who applied to Isparta Suleyman Demirel University Faculty of Dentistry Oral and Maxillofacial Surgery clinic for extraction of their third molar teeth with complete bone retention were included. Concentrated Growth Factor was obtained by centrifuging the blood taken from the patient after tooth extraction. It was sutured by placing CGF in the extraction socket. Soft tissue healing was evaluated with Landry's wound healing index.

Results: According to Landry's wound healing index of 38 patients; 65% had a wound healing score of 5 (excellent), 10% had a wound healing score of 4 (very good), 0.7% had a wound healing score of 3 (good), and 15% had a wound healing score of 2 (bad) was observed.

Conclusion: As a result of this study, it can be said that CGF increases soft tissue healing.

Keywords: Concentrated growth factor, Platelet, Soft tissue healing







OP-082 Low-grade fibromyxoid sarcoma of the maxilla: A rare case report

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Objective: Low-grade fibromyxoid sarcoma is a rare, malign, soft tissue tumor first described by Evans in 1987. Although its pathological appearance is benign, it has a high potential for recurrence and metastasis. There are very few reported cases in the oral cavity, most of the cases described so far are in the extremities. These tumors occur mostly in young patients and are rare in adults. To date, 13 cases of Low grade fibromyxoid sarcoma in the oral cavity have been described and maxillary case is decribed in this case report.

Case: A 59-year-old female patient was referred to the Department of Maxillofacial Surgery at Başkent University in February 2023 with the complaint of localized swelling under her denture. During surgical excision of lesion it was detected that lesion had caused bone destruction and perforated the palatinal mucosa and sinus mucosa. The lesion was not associated with bichat, parotid gland and stenon duct. The excised lesion was observed to have a gelatinous consistency. The preliminary diagnosis was odontogenic myxoma and peripheral giant cell granuloma with central origin.

Conclusion: Pathologic examination diagnosed the lesion as a low-grade malignant mesenchymal neoplasm. Low-grade fibromyxoid sarcoma is very rare in the maxillofacial region and its appearance may resemble benign neoplasms such as peripheral giant cell granuloma and odontogenic myxoma. However, since it is a malignant tumor, the treatment protocol should be different from other neoplasms. Histopathologic evaluation is mandatory in order to make the correct diagnosis especially in these type of benign looking malignant lesions

Keywords: fibromyxoid sarcoma







OP-083

Management of Surgical Treatment Process After Suicide With A Gun: Mandibular Reconstruction, Lip Aesthetics And Implant-supported Temporary Prosthesis

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Objective: Gunshot injuries are always known to cause severe morbidity and mortality when head and neck are involved. Close-range gunshot wounds in the head and neck region can result in devastating aesthetic and functional impairment. The complexity in facial skeletal anatomy cause multiple medical and surgical challenges to an operating surgeon, demanding elaborate soft and hard tissue reconstruction. Traditional treatment of these injuries involves initial wound debridement and soft tissue closure without replacement of lost bone. Soft tissue injury, which could not be closed primarily, is allowed to be healed by secondary intention. Bony reconstruction is addressed secondarily, which often results in significant scar contracture and suboptimal cosmetic and functional outcome.

Case: Our patient is 29 years old, male. He committed suicide by shooting himself under the chin with a pistol. However, the suicide attempt failed. The patient was taken to the emergency service and soft tissue closure was performed by plastic surgery. Then he was referred to us for the defect in his mandible.

Surgical treatment was performed to be done in 3 stages.

1. Reconstruction of mandible bone defect, correction of collapse and occlusion of posterior teeth

- 2. Providing lip aesthetics
- 3. Dental implant operation

Conclusion: Treatment of gunshot wounds is complex. The aim of treatment is to provide soft tissue closure first and then to repair the defect of bone structures. After these are provided, necessary aesthetic corrections should be made. Careful planning is required for treatment to be successful.

Keywords: gun shooting injury, mandibular reconstruction, suicide







OP-084 Central Giant Cell Granuloma Case Report

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Objectives: Central giant cell granuloma (CGCG) is a slow-growing, destructive lesion that may occur in the maxilla or mandible due to intramedullary haemorrhage, trauma, some syndromes, hormonal disorders, developmental and infectious causes. Cases of CGCG occur in the mandible in women under the age of 30 years and usually in the mandible. It constitutes 1-7% of all benign lesions in the jaws. Definitive diagnosis is made histopathologically. There are various treatment modalities. Surgical treatment of the lesion is the traditionally accepted method in terms of reducing the possibility of recurrence. Intarlesional steroid, alpha-interferon, calcitonin injections are also used as supportive or definitive treatment.

Case: A 10-year-old female patient who presented to our clinic with a swelling in her mandible was diagnosed as central giant cell granuloma after biopsy. Parathormone level and other values were normal in blood tests. The patient was initially treated with intralesional steroid therapy, which is a noninvasive method, and then excisional surgery was performed due to the lack of shrinkage in the lesion.

Conclusions: Although central giant cell granuloma is benign, it may have a destructive effect. There are two subtypes, aggressive and non-aggressive, but there is no histological difference. The aggressive type is usually seen in young adults and has a high recurrence rate. In such aggressive cases, noninvasive methods are supported by surgical methods to reduce recurrence.

Keywords: central giant cell granuloma, bening lesions







OP-085 Rising Star of Orthognathic Surgery: Surgery-First

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Objective: The surgery-first approach offers an alternative to the orthodontics-first approach for correction of maxillofacial deformity. The final outcomes, in the way of facial esthetics, dental occlusion, and stability, are similar when using orthodontics-first and surgery-first approaches. Dental occlusion and facial esthetics can show immediate improvement after surgery when using a surgery-first approach; this almost eliminates the time spent on preoperative orthodontics.

Case: 30 cases who applied to Suleyman Demirel University Department od Oral and Maxillofacial Surgery with the complaint of dentofacial deformity and underwent orthognathic surgery with 'surgery first' approach will be presented.

Conclusion: The surgery-first approach in orthognathic surgery has recently created a broader interest in completely eliminating time-consuming preoperative orthodontic treatment. Available evidence on the surgery-first approach should be appraised to support its use in orthognathic surgery. Total treatment duration was substantially shorter in cases of surgery-first approach use. Surgery first approach has become popular because of the shorter treatment time and faster aesthetic expectations than conventional treatment.

Keywords: Surgery-first, dentofacial deformities, orthognathic surgery







OP-086 Coronoid process hyperplasia as a rare phenomenon: A case report

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Objective: The coronoid process is a beaklike process in the ramus of the mandible. Coronoid process hyperplasia (CPH) is a rare phenomenon in which an overgrown process interferes with mandibular rotation and lateral excursion and hence leads to restricted mouth opening (RMO). The etiology is not completely known.

Case: This article reports a 22-year-old female with Right side CPH and progressive RMO since 2 years ago.

When she presented to the OMFS clinic in Kerman bahonar hospital, The disorder had affected her mouth opening (MMO: 2 mm). she had eating disorders and a bulge of the hyperplasic coronoid could be seen and touched just beneath of the zygoma body below her right eye since the process was pushing towards the adjacent bones so she couldn't open her eye fully as well. After taking CT and workup, patient went through a 4 hour surgery. A hemicoronal approach was made to access to the hyperplastic process. When the process was cut, the bulky deformity of zygomatic bone was also removed in the shape of a circular lid. The point is that the removed zygomatic bone was not thrown away but was manipulated and some crossing lines were made to make it more flexible, then was put in its place upside down(the bulge was reversed). This was done for the sake of preservation of the bone and acceleration of healing.

Conclusion: The patient was able to open her mouth efficiently after the surgery(MMO: 35) and the bulge was removed with no sensory disturbance.

Keywords: Coronoid, coronoid hyperplasia, coronoid pathology







OP-087 The Fastest Way to Get Aesthetics Results in Orthognathic Surgery: Surgery Only Approach

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Introduction: Orthognathic surgery is generally performed to correct malocclusions caused by skeletal incompatibilities. Treatment plan varies depending on timing, classification, and available surgical techniques. The plane of occlusion is a good guide for the surgeon in establishing the optimal position of the skeletal segments during orthognathic surgery. Although the conventional procedure is still a top priority, planning and patient expectations are changing day by day. The fact that there is no need for orthodontic treatment before surgery and the shortening of the treatment period makes the surgical method advantageous for patients as well.

Case: In this case series, 11 cases who applied to Süleyman Demirel University Oral, Dental and Maxillofacial Surgery Clinic with the complaint of dentofacial deformity and underwent Le Fort I osteotomy and bilateral sagittal split osteotomy with "surgery only" approach will be presented in the light of literature information.

Conclusion: "Surgery only" approach in orthognathic surgery has become more popular in recent years. This method, which is applied within the right planning in appropriate cases, also has some advantages over conventional methods. The shortening of the treatment period, the faster attainment of aesthetic expectations and the absence of orthodontic treatment have increased the demand for this method by the patients. However, more studies are needed in this area.

Keywords: Orthognathic surgery, Le Fort I osteotomy, surgery only approach





OP-088 Unilateral Mandible Angle Fracture: A Case Report

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Objective: Mandible fractures are among the most common fractures in the maxillofacial region. Recent reports suggest about 30% of mandible fractures occur at the angle. In general, the area where the mandible body and ramus come together is referred to as the angle. The third molars arise in this area, if present, and may be involved in these fractures. Angle fractures occur in a triangular region between the anterior border of the masseter muscle and the posterosuperior insertion of the masseter muscle. The aim of this case report is to discuss the treatment methods of angle fractures and show the treatment approach we chose in our case.

Case: A 21-year-old patient was admitted to our clinic with a history of assault. In the clinical examination, swelling on the right cheek and ecchymosis in the soft tissue were detected. Radiologic examination revealed a fracture line in the right angulus. After radiologic and clinical examination, the patient underwent an open reduction with internal fixation approach.

Conclusion: The angle fracture is still one of the most common fractures of the mandible and continues to be associated with the highest complication rates. Currently, several techniques are considered acceptable to treat mandibular fractures; the most commonly accepted technique for isolated mandibular angle fracture is a single miniplate placed at the superior border. The most important advantages of this technique; intraoral placement of the plates, prevention of extraoral scar formation and avoiding possible damage to the marginal mandibular branch of the facial nerve.

Keywords: Open reduction, Angle fracture







OP-089

Massive Bleeding After a Tooth Ecxtraction: Diagnosis of Unknown Arteriovenous Malformation of the Mandible, A Case Report

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Objective: Arteriovenous malformation (AVM) of the head and neck is a rare and potentially life threatening entity due to massive haemorrhage. There are several indications for treatment, including age of the patient and location, extent and type of vascular malformation. Endovascular therapy can effectively cure most lesions with limited tissue involvement. Surgery can be used in selected cases in combination with embolization. Here we report the case of a child affected by an AVM on the left side of the mandible.

Case: A 9-year-old male patient applied to our clinic with the complaint of swelling in the left intraoral posterior region of the mandible. The patient was consulted to an otolaryngologist and radiologist with the preliminary diagnosis of arteriovenous malformation because of the spontaneous bleeding, fluctuation in the swelling and the purple color of the swelling. However, the lesion was interpreted as an odontogenic cyst after tomography. Then, our patient underwent tooth extraction and cyst enucleation under general anesthesia. After the tooth extraction, he was transported to the emergency room for uncontrolled and recurrent oral bleeding and embolization was performed by the radiologist.

Conclusion: Early diagnosis by recognizing clinical features and experienced multidisciplinary team management is essential to minimize and avoid later complications.

Keywords: Arteriovenous malformations, Intraosseous, Mandible







OP-090

Investigation of the Effect of Age, Gender and Systemic Conditions on Anxiety in Oral Surgery Patients with Different Tests

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Objective: The aim of this study was to determine the effect of the operation and dental anaesthesia on anxiety in patients scheduled for oral surgery, by comparing two anxiety scales used for this purpose. The study designed to evaluate the effect of chronic diseases, age and gender on anxiety and to compare anxiety and need for information.

Materials-Methods: A total of 91 patients, 46 ASA-1 and 45 ASA-2, were included to evaluate BAI (Beck Anxiety Inventory) and APAIS (Amsterdam Preoperative Anxiety and Information Scale). Results: The BAI and APAIS-A scale used to determine anxiety was significantly higher in ASA-2 than ASA-1. APAIS-B values, which measure the need for information, were found to be significantly higher in ASA-2 patients. APAIS and BAI values were correlated with each other in the ASA-1 group, while APAIS-B was not correlated with other values in the ASA-2 group. Higher anxiety scores were obtained in female patients. Age was inversely correlated with anxiety, while the need for information did not change.

Conclusion: The APAIS scale may provide more detailed information to evaluate anxiety in the group with chronic diseases. While the need for information increases as there is a raise in the anxiety of systemically healthy individuals. The need for information is higher in patients with chronic health problems, regardless of their anxiety status.

Keywords: Anxiety, APAIS, BAI







OP-091 Adenoid Ameloblastoma In The Posterior Mandibula: A Case Report

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Introduction: Adenoid ameloblastoma (AA) is a new entity added in the WHO classification of odontogenic lesions in 2022. It is defined as an epithelial odontogenic neoplasm composed of cribriform architecture and duct-like structures, and frequently includes dentinoid. It usually presents as a painless swelling with an incidence peak in the 4th decade, and with slight male preference. The essential diagnostic criteria have been described as an ameloblastoma-like component, duct-like structures, whorls/morules, and cribriform architecture, while dentinoid, clear cells, focal ghost-cell keratinization are reported as desirable features.

Case: 36 year old female patient referred to our department with no symptoms. Panoramic radiography showed a well-circumscribed, unilocular radiolucency in the left posterior mandibula. The teeth adjacent to the lesion (36, 37) were detected as vital in EPT. In incisional biopsy, a piece of soft tissue measuring $1.5 \times 0.5 \times 0.2$ cm in pink and white colour was seen. Keratocyst or ameloblastoma was considered as preliminary diagnosis. After the biopsy result, ameloblastoma operated with total excision and aggressive curettage. Teeth 36 and 37 were extracted. No recurrence was observed in the 1-year follow up.

Conclusion: Treatment of ameloblastoma is curettage/enucleation or total/partial resection. Adenoid ameloblastoma is a rare neoplasm with high recurrency insidance. (45,5%-70%). It may recur within 10 years. For this reason, we continue to follow the patient with 6-month intervals. Clinicians and oral pathologist should be familiar with the adenoid ameloblastoma and its differential diagnosis for accurate diagnosis and management.

Keywords: Adenoid ameloblastoma, Mandible, Treatment





OP-092

A Retrospective Investigation of the Three-Dimensional Precision of Virtual Surgical Planning in Orthognathic Surgery: A Preliminary Study

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Objective: to investigate the accuracy of virtual surgical planning (VSP) in patients undergoing bimaxillary orthognathic surgery by comparing the planned and postoperative outcomes.

Materials-Methods: Ten patients who underwent bimaxillary orthognathic surgery, had preoperative 3D VSP performed by NemoStudio (NemoFAB, v2020), and postoperative computed tomography scans at 6-month follow-up from 2020 to 2022 were included in the study. Preoperative VSPs and postoperative models reconstructed by Mimics software were superimposed semi-automatically in 3-matic software by point and global registration tools. Registered 3D models were imported into Mimics software. Ten reference points (A and B points, right and left incisura, right and left coronoid, right and left gonion, maxillary dental midline, and pogonion) were defined. Two independent observers placed the points on models. The distances between the pre and postoperative points were measured and statistically analyzed with a Single Sample T-Test. In addition, part comparison analysis was performed with 3-matic software to show the deviations between the pre and postoperative models.

Results: There was a statistically significant difference in the Pogonion point (p=0,003). "Part Comparison Analysis" showed a significant difference in the chin region.

Conclusion: VSP appears to be an accurate and reproducible method for orthognathic surgery planning. More accurate results can be achieved by using custom cutting guides and fixation plates. Excessive mandibular rotation after surgery due to factors such as vertical force application to segments while fixation or over-impaction of the maxilla may result in pre and postoperative discrepancies in the chin region.

Keywords: virtual surgical planning, accuracy, orthognathic surgery







OP-094 Mandible Fractures with Teeth Involvement: A Retrospective Study

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Aim: The aim of this retrospective study is to investigate mandible fractures with teeth involvement, including fracture location and the correlation between tooth extraction and fracture location.

Material-Method: The study included 30 patients with mandible fractures, four of whom had bilateral fractures. The fractures were classified as angle (n=10), corpus (n=6), parasymphysis (n=9), and symphysis (n=9). Patients with condylar fractures and angle fractures without teeth were excluded. The location of the fracture line and tooth extraction were recorded for each patient.

Results: Of the 34 fractures, 25 had teeth distal to the fracture line, and four of these teeth had been extracted (16%). Six of the 34 fractures had teeth mesial to the fracture line, and six of these teeth had been extracted (17.6%). There was no correlation between the location of the fracture line, gender, and tooth extraction, either mesially or distally.

Conclusion: This retrospective study found that tooth extraction was not correlated with the location of the fracture line in mandible fractures with teeth involvement. The study highlights the importance of careful examination and management of mandible fractures with teeth involvement, as well as the need for further research on the topic.

Keywords: Mandible fracture, Tooth extraction







OP-095 C-Reactive Protein Levels After Orthognathic Surgery: A Prospective Preliminary Study

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Objective: C-reactive protein (CRP) is an acute-phase protein released from the liver to the bloodstream in response to inflammation. Postoperative CRP values have been used for predicting complications in many surgical procedures. This study aimed to determine the mean CRP interval, evaluate the relationship between CRP values and postoperative complications, and associate the patient's analgesic requirements in orthognathic surgery.

Materials-Methods: This prospective study includes the patients who underwent orthognathic surgery at İstanbul Medipol University, Oral and Maxillofacial Surgery Department, between October 2022 and April 2023. CRP levels of 24 patients were assessed preoperative (TO) and postoperative 1st day (T1). Operation time, intraoperative bleeding, intraoperative urination, age, gender, dentofacial deformity type, visual analog scale (VAS), and total administrated analgesics were also noted, and the data were evaluated statistically in IBM SPSS.

Results: The mean CRP value was 2.60 ± 4.27 for the preoperative and 66.13 ± 29.58 for the postoperative period. There was a moderate correlation between the operation time and postoperative CRP values (r=0.33). A paired t-test revealed that orthognathic surgery significantly affects CRP values (p < 0.001). There was a weak correlation that postoperative CRP value influences analgesic consumption (r=0,03)

Conclusion: The findings clearly indicate that orthognathic surgery increases postoperative CRP value. The postoperative CRP value 66.13 ± 29.58 is acceptable after orthognathic surgery and does not represent a sign of infection. High postoperative CRP value is weakly associated with greater analgesic consumption.

Keywords: analgesia, C-reactive protein, orthognathic surgery







OP-096 Treatment Of Mucor Infection In The Maxilla: A Case Report

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Objective: Managament Of Destruction Caused By Mucor Infection In The Maxilla With Buccal Flap Technique

Case: A 36-year-old male patient with uncontrolled diabetes was treated with medication for the treatment of mucor in the otorhinolaryngology inpatient service. The patient was then referred to our clinic. As a result of intra-oral examination, it was observed that the bone was exposed and necrotic in the left maxilla palatinal region of the patient. Extraoral examination revealed paralysis of all branches of the ipsilateral facial nerve. The patient was planned for sequestrotomy and then buccal flap operation to close the area and prevent fistula formation. Palatal plate was applied to the patient before the operation. During the sequestrotomy, teeth 5, 6,7, which were in the necrotic bone and lost their vitality, were extracted. A palatal plate was used after the sequestrotomy. After 4 weeks, it was ensured that all sequestrants were removed and the flap operation was performed and the bischat and buccal flaps were turned into the region. The patient was prescribed analgesics, antihistamines and antibiotics (Amphotericin B 5 mg/kg/day). The plaque was realigned and placed. Sutures were removed 2 weeks later. At the follow-up 4 weeks later, it was seen that the opening was completely closed. The patient's controls are continuing and no problems were observed as a result of the 9-month routine controls.

Conclusion: Mucormycosis is a acute diseases and the diagnosis of mucormycosis is based on histopathology and culture. Early diagnosis and treatment are important in terms of recovery and mortality reduction.

Keywords: maxilla, mucor







OP-097

American Association of Oral and Maxillofacial Surgeons' 2022 Position Paper on Medication-Related Osteonecrosis of the Jaws - What changed?

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Objective: With this presentation we aim to reflect on these differences from the previous guidelines, and discuss how they correlate to MRONJ management.

Materials-Methods: Review of the position paper from the American Association of Oral and Maxillofacial Surgeons (AAOMS), titled "Medication-Related Osteonecrosis of the Jaw - 2022 Update,".

Results:

Conclusion: The latest position paper on Medication-Related Osteonecrosis of the Jaws (MRONJ) from the American Association of Oral and Maxillofacial Surgeons (AAOMS), titled "Medication-Related Osteonecrosis of the Jaw - 2022 Update," continues to expand our knowledge of MRONJ. It differs from its' predecessors by further emphasizing preventive measures, surgical intervention, the diseases' multifactorial nature and predisposing factors. Additionally, it deemphasizes the role of certain medications and aspects of diagnosis, brings the efficacy of "drug holiday" into question. In light of the new information, the paper provides algorithms to assist in the diagnosis and treatment of MRONJ.

Keywords: Medication-Related Osteonecrosis of the Jaw, Position Paper







OP-098

Evaluation Of The Clinical And Microbiological Effects Of Chlorhexidine Toothpaste On Wound Healing After Widsom Tooth Extraction

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Objective: Healing and infection are two of the important concerns that face oral and maxillofacial surgeons after a third molar extraction procedure. Chlorhexidine is an antiseptic and disinfectant. It can help with mouth infections, mouth ulcers, and gum disease. Our study aim is to clinically compare the effects of chlorhexidine-based toothpaste versus normal toothpaste on healing and infection after extracting the wisdom tooth.

Materials-Methods: In this an in-vivo and split-mouth study, the groups were randomly divided into control and study groups. Chlorhexidine based toothpaste and normal toothpaste was used. Before and after extraction, a saliva sample had been taken, and 4 tests had been done for each sample: direct inoculation and inoculation into three different ratios (10-2, 10-4, and 10-5), and each of them had been inoculated into diluted convenient culture media that enhance the bacterial growth. We measured and compared the bacterial intensity and evaluated the clinical results.

Results: The study involved 22 patients aged 18–31 years old. Postoperative pain and edema in the study group were found to be statistically more effective. However, no statistically significant difference was observed between the two groups (in all-diluted ratio) in terms of bacterial intensity.

Conclusion: In the literature, there are not enough studies about chlorhexidine based-toothpaste. In our study, we obtained that the chlorhexidine-based toothpaste does not affect the oral flora as same as chlorhexidine-free toothpaste, but it is clinically effective (on pain and edema).

Keywords: Chlorhexidine, toothpaste, wisdom tooth







OP-099 Evaluation of the Effects of St. John's Wort Oil on Postoperative Complications After Epulis Fissuratum Surgery

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Objectives: After surgery of epulis fissuratum, patients may complain of consequences such as bleeding, pain, infection, and edema, which have a significant effect on the standard of living. The objective of this research was to determine the effects of St. John's Wort oil on postoperative complications following epulis fissuratum surgery.

Materials-Methods: In total, 37 total edentulous patients with epulis fissuratum were included in the study who were referred to the Van Yüzüncü Yıl University, Faculty of Dentistry, Department of Maxillofacial Surgery. The patients were divided into two goups chlorhexidine gluconate + benzydamine HCL mouthwash was used in the group 1, and St. John's Wort oil was used in the group 2 as a moutwash. VAS was used to evaluate the postoperative pain and swelling. Wound width, depth and legth measurements were made for the evaluation of wound healing after the operation on the 2nd, 7th, 14th and 28th days.

Results: The study's findings showed that there was no statistically significant difference between the groups' VAS scores for pain and edema (p>0.05). It was observed that wound length healed faster on the 2nd postoperative day and wound width healed faster on the 14th day in the St. John's Wort oil group (p<0.05).

Conclusion: In this study it was observed that using St. John's Wort oil as a mouthwash was an effective alternative for the gold standard chlorhexidine gluconate mouthwash in minimizing postoperative problems and promoting wound healing without side effects following epulis fissuratum surgery.

Keywords: St. John's Wort oil, epulis fissuratum, wound healing







OP-100 Surgical Removal Of A Fallen Bullet In The Cheek With An Extraoral Approach

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Objective: When a bullet is fired into the air, the bullet loses its muzzle velocity after a period of time and starts to fall to the ground gaining speed due to gravity. At this stage is it is defined as falling bullet. These bullets can cause serious injuries and deaths in the area where they fall. The aim of this study is to present the surgical removal of a bullet that has been in the cheek for 40 years with an extraoral approach.

Case: An 58 year old male patient referred to our clinic with the complaint of a hard mass that can be felt in the cheek area, causing discomfort during function of the mouth. The patient told in his story that a bullet hit his face during a wedding ceramony 40 years ago, and the bullet remained in the cheek area because he was afraid of surgical operation. The patient had no pain. Radiological evaluation revealed a a radiopaque bullet shaped foreign body (1x0.5cm) in the the cheek in front of the massater muscle. The bullet extracted under general anesthesia via extra oral approach. Three month follow up revealed minimal extra oral scar tissue which was acceptable for patient.

Conclusion: As a result of the uncontrolled use of guns in all kinds of celebrations, serious injuries that can cause morbidity and mortality are seen. In order to prevent such injuries, it is necessary to increase public awareness and control individual armament

Keywords: extra oral approach, free-falling bullet, gunshot wounds







OP-101

Horizontal and Vertical Bone Augmentation and Simultaneous Implant Placement Using Autogenous Bone Ring Technique

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Objective: The bone ring technique has been described as a one-stage approach to repair vertical alveolar ridge defects or used in immediate implant surgeries, in which an autogenous or allogeneic bone block graft is stabilized with a dental implant. The main advantage of this technique is that it provides three-dimensional augmentation and does not require 6 months of waiting for implant placement like other grafting techniques.

Case: In this case series, 11 cases who applied to Süleyman Demirel University Oral and Maxillofacial Surgery Clinic with the complaint of vertical alveolar ridge defects and underwent Bone Ring Technique and simultaneous implant placement will be presented.

Conclusion: Bone ring technique (BRT) in implant surgery is a method that has become popular in recent years. It can be concluded that BRT may be a valid option for the restoration of single vertical defects with dental implants in terms of bone gain, implant survival rates and complications.

Keywords: bone augmentation, bone ring technique







OP-102 'Genioplasty' Is An Effective Approach For Orthognathic Surgery?

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Objective: Chin morphology contributes to facial aesthetics as a result of the maintenance of the balance between nose, lips, chin and perioral region. The aim of genioplasty is to correct the position of the jaw line, to provide an aesthetic under-lip fold and a competent lip filling. Orthognathic surgery is often combined with genioplasty in an attempt to create an aesthetic facial shape.

Case: In this case series, 52 cases who applied to Süleyman Demirel University Oral and Maxillofacial Surgery Clinic with the complaint of facial asymmetry and aesthetic concern and underwent genioplasty will be presented. No complications were encountered in any of these cases.

Conclusion: Genioplasty is a procedure that presents excellent stability and has a relatively low risk of complications. Genioplasty can be performed as an isolated procedure or associated with other surgical procedures making possible satisfactory results in the facial balance, improving the aesthetics and function of the patients.

Keywords: Facial aesthetic, Genioplasty, Orthognathic surgery







OP-103 Dentinogenic Ghost Cell Tumor Of the Maxilla: A Case Report

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Objective: Dentinogenic ghost cell tumor (DGCT) is a rare, benign odontogenic tumor with aggressive behavior, often causing local destruction in the posterior regions of the maxilla and mandible. This case report aims to highlight the importance of diagnosing DGCT, selecting the treatment approach and the need for long-term follow-up due to the potential for recurrence.

Case: A 15-year-old female patient with a history of cerebral palsy and epilepsy presented with a progressively enlarging swelling in the right maxillary posterior region of 1-year duration. Clinical, radiographic, and histologic evaluations were performed. The lesion invaded the nasal fossa, ethmoid and maxillary sinuses, causing expansion and perforation of the buccal cortical bone and resorption of the nasal sidewall. Considering the tumor's size, location, proximity to vital structures and the patient's medical history, enucleation was chosen as the treatment approach. The tumor was enucleated and a three-year follow-up showed no recurrence or residual tumor.

Conclusion: Diagnosis and management of DGCT require the collaborative efforts of oral and maxillofacial surgeons, radiologists, and pathologists. Treatment decisions should be tailored to the patient's unique condition, Due to the potential for recurrence, long-term follow-up is essential. This case report demonstrates that enucleation can be a viable alternative treatment modality in specific circumstances and it underscores the importance of individualized treatment planning and close monitoring of these patients.

Keywords: Dentinogenic Ghost Cell Tumor, Enucleation, Odontogenic Tumor






OP-104

Treatment of Mandibular Canal-Associated Traumatic Bone Cysts with Curettage and Combined Decompression Method: 2 Case Reports

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Objective: Traumatic bone cyst is a bone lesion that is not surrounded by epithelium and does not show neoplastic characteristics. The etiopathogenesis of this lesion, which is also considered as a pseudocyst, has not been fully elucidated. Lesion is generally asymptomatic. This lesion, which mostly affects the mandible, may cause paresthesia by causing displacement in the mandibular canal.

Case 1: 34-year-old male patient, clinical and radiological examination revealed a 29x19 mm radiolucent lesion starting from the distal of the mandibular incisors and extending to the apical of the premolars and first molars. Under local anesthesia, a window was opened from the buccal bone and biopsy specimen was obtained by peripheral curettage, and a penrose drain was placed in the opened window. Due to the risk of paresthesia, the patient, who underwent decompression with the marsupialization method for 4 months, was followed up for 18 months.

Case 2: 13-year-old female patient showed a radiolucent area in her panoramic radiograph taken during her routine appointments in the pedodontics department. A biopsy was planned for the 18 x 28 mm lesion associated with the mandibular canal. Cyst epithelium was not observed in the window opened under local anesthesia. The lesion was curetted and closed primarily. Bone healing was observed in the patient who was followed up for 9 months.

Conclusion: Traumatic bone cysts can be treated with different methods such as curettage and grafting, decompression. Depending on the size and localization of the lesion, the appropriate treatment method should be chosen.

Keywords: Curettage, Decompression, Traumatic Bone Cysts





OP-105

Evaluation of the effects of three-dimensional morphology of pterygomaxillary junction on efficiency of surgically assisted rapid palatal expansion

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Objective: There is no definite consensus on disjunction of pterygomaxillary junction (PMJ) in surgically assisted rapid maxillary expansion. In the present study, effects of horizontal, vertical and sagittal dimensions of the PMJ on dental and skeletal expansion patterns were investigated retrospectively.

Materials-Methods: In the present study patients aged between 17-30 years, whose PMJ's were not separated during surgery and whose expansion periods were completed were included. As a result of the retrospective evaluation 20 patients with complete preoperative dental volumetric tomography (DVT), dental models, posterior-anterior (PA) cephalogram and postoperative dental models, PA cephalogram records were included. The models were scanned, parameters giving information on expansion pattern such as transarch length between the first premolar, second premolar, first molar teeth and the inclination angles of the teeth were evaluated by NemoCeph. Furthermore, nasal floor width, intermolar distance and transversal expansion of maxilla were measured from PA cephalogram.

Results: There was no correlation between the horizontal, vertical and sagittal dimensions of PMJ and expansion pattern(p>0.05). Only the intermolar distance, measured from PA cephalogram, and horizontal thickness of PMJ has weakly negative correlation(p: 0.031)

Conclusion: According to results of the present preliminary study, it can be concluded that the three dimensional morphological features of PMJ have no effect on maxillary expansion pattern. Therefore, any of these morphological parameters cannot be used to predict expansion pattern and evaluate the necessity of PMJ separation. In order to reach an accurate conclusion about the study, studies with larger samples are required.

Keywords: pterygomaxillary junction, surgically assisted rapid palatal expansion







OP-106

Evaluation of the compatibility of clinical pre-diagnoses and histopathological diagnoses of pathologies in oral and maxillofacial surgery: a retrospective study

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Objective: The diagnosis of the jaw lesions is established from the different clinical and radiological features, and the final diagnosis of these lesions is based on the histopathological examination. The aim of this study was to determine the frequency of biopsied jaw lesions and gather the information including clinical pre-diagnoses and final diagnoses of the lesions to compare their compatibility.

Materials-Methods: Biopsy of the lesions taken between 2017-2021 in İstanbul Okan University Faculty of Dentistry were reviewed in this study. The provisional diagnosis and histopathological validations of the lesions were compared. Data on location of lesions as well as patient demographics were also evaluated. The lesions were divided into three major groups as 1- developmental/ reactive and inflammatory lesions of the jaw, 2- cystic lesions, 3- tumor and tumor-like lesions.

Results: 178 biopsied lesions of 164 patients (82 male, 82 female) were included in this study. 52 lesions were in group 1 and periapical granuloma was the most frequent. 105 lesions were in group 2 and radicular cyst was the most frequent. 9 lesions were in group 3 and ameloblastoma was the most frequent. 12 lesions were named as undefined. The concordance of the pre-diagnoses and final diagnoses of the lesions were found satisfyingly acceptable.

Conclusion: The diagnosis of oral lesions should be based on clinical, radiographic, and histopathologic features. Surgeons must establish histological diagnosis of their cases by routine biopsy and provide an adequate treatment, which might involve further procedures. This will prevent unnecessary treatments and delayed surgical operations.

Keywords: clinical provisional diagnosis, jaw lesions







OP-107 Endoscopy assisted removal of an infected TMJ prosthesis: A case report

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Objective: Total joint replacement is a viable treatment method in management of endstage temporomandibular joint disease. However, several complications that require removal of the prosthesis may also occur. This report aims to present a simplified surgical approach for removal of an infected TMJ prosthesis.

Case: A 38-year-old male referred to our department with complaints of severe pain and ear discharge and deafness on left side. The patient had undergone total TMJ prosthesis surgery 11 years ago. Clinical and radiological examination revealed the bone growth with infectious components of the TMJ prosthesis. Under general anesthesia, preauricular approach was performed to expose the joint area. Removal of the ramus component of the prosthesis was performed with endoscopic navigation and an angulated screw-driver via intraoral incision. An abdominal fat pad and dermal package graft was placed to the joint space to prevent re-ankylosis.

Conclusion: Combining the preauricular and intraoral approaches may reduce the risk of Facial nerve damage by decreasing the ecartation forces. Using the endoscope may help the visualization of the ramus by reducing the nerve injury risk without any new facial scar. This technique may also be performed to reduce the complication rates of the TMJ surgeries.

Keywords: Endoscopic surgery, TMJ prosthesis, total joint replacement







OP-108 Huge Dentigerous Cyst in The Mandible: A Case Report

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Objective: Our aim in this case report is to share the treatment of a large dentigerous cyst with a marsupialization and enucleation approach. Bone formation was completed after 24 months of follow-up.

Case: The 31-year-old male patient was admitted to our clinic with a complaint of dental pain. Panoramic radiography revealed a smoothly circumscribed, multilocular radiolucent lesion associated with the unerupted right mandibular third molar, from tooth number 44 and extending to the right condyle. It was determined that the lesion displaced the mandibular canal inferiorly. The teeth in the lesion area were vital and root resorption was not observed. Due to the large size of the lesion, the risk of damage to vital structures, and the possibility of mandibular fracture, marsupialization, and enucleation treatment were performed. As the lingual cortical plate was very thin initially the drain was placed in the third molar region. After the cyst was reduced in size extraction of the third molar was performed and marsupialization treatment was sustained. As the reduction in the size of the cyst reached the appropriate dimensions enucleation was performed. In the last examination, it was observed that the bone formation in the region was almost complete.

Conclusion: Dentigerous cysts are among the most common cysts of the jaws seen after radicular cysts. The most important features of these lesions are that they grow slowly and without symptoms and occur around the impacted tooth, surrounding the crown of the related tooth.

Keywords: Dentigerous cyst, Marsupialization, Enucleation





OP-109

Implant-supported Rehabilitation of Atrophic Edentulous Jaws with Severe Vestibular Depth Lost by Multi-staged Vestibuloplasty: A Case Report

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Objective: An adequate alveolar crest is a prerequisite for successfull prosthetic rehabilitation. The success of the prosthesis depends on the surgical repositioning of mucosal and muscular insertions that increase the vestibular depth for retention. Vestibuloplasty techniques eliminate muscle insertions, reposition the mucosa and give the prosthesis more stability.

Case: A 59-year-old female patient applied to our clinic with the complaint that she could not use her dental prostheses. Clinical and radiographic examinations revealed edentulous maxilla and mandible, insufficient amount of keratinized gingiva and insufficient vestibular depth (8 mm). A staged surgical correction of to increase the keratinized attached gingiva followed implant-supported removable prosthesis was planned for prosthetic rehabilitation. In the 1-month follow-up, it was determined that the amount of keratinized gingiva and vestibular depth (15 mm) increased.

Conclusion: The proposed technique may provide satisfactory outcomes for prosthetic rehabilitation particularly in patients with severe loss of vestibular depth.

Keywords: atrophic jaws, decreased vestibular depth, staged vestibuloplasty







OP-110 A modified technique for reduction of condyle fractures

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Objective: Fractures of the mandibular condylar process are common and the current literature recommends open reduction and internal fixation (ORIF) to provide early functional rehabilitation. Preauricular approach is widely used for ORIF, however, limited access and difficulty in rigid fixation of the lower part of the condylar prominence and potential facial nerve injury during ecartation are major problems of this approach. This study aims to present a combined technique of preauricular and intraoral approaches to reduce above-mentioned limitations in management of condyle fractures.

Case: This report presents two cases with condyle fractures which were reduced with the proposed technique. Following the preauricular incision to expose the fractured segment, an intraoral incision was performed on the mandibular ramus and mucoperiosteal flap was harvested to reach the condyle. The fractured condylar head was reducted and a long miniplate was fixed to the condylar head. Afterwards, the condylar head was placed to its original position with controlling the extended part of the plate on the ramus intraorally. Finally, the lower part of the plate was fixed to the ramus intraorally using an angled-screwdriver. Post-operative period was uneventful for both patients and no complication including facial nerve injury was observed.

Conclusion: The proposed technique may be a safe and reliable alternative to retromandibular or transparotid approaches for reduction of condylar head fractures.

Keywords: Condyle Fracture, Facial Nerve Incury, Preauricular Approach





OP-111

How Does Controlled Hypotension Affect Cerebral Oxygen Saturation and Postoperative Cognitive Function in Patients Undergoing Orthognathic Surgery: A Prospective Study

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Objective: The aim of this study was to investigate the effect of controlled hypotension on cerebral oxygen saturation(rSO2) using near-infrared spectroscopy (NIRS) and the evaluation of postoperative cognitive function in patients undergoing orthognathic surgery.

Materials & Methods: Fifteen adult patients who underwent orthognathic surgery with controlled hypotension were enrolled in this study. rSO2 was evaluated during controlled hypotension by NIRS. The cognitive function of the patients was assessed using the Mini Mental State Examination (MMSE). It was conducted three days before surgery, 10 days, and 30 days postoperatively. Relationships between postoperative MMSE and duration of surgery, duration of intraoperative controlled hypotension, and NIRS scores were analyzed.

Results: Cerebral desaturation was observed in 1 out of 15 patients (6.6 %) during hypotensive anesthesia. When the preoperative and postoperative MMSE scores were evaluated, a statistically significant increase was observed between the preoperative (27.4 ± 2.41) and postoperative (28.57 ± 1.9) scores (p=0.003). The difference between the scores of the postoperative 10th day(28.53 ± 1.96) and the postoperative 30th day(28.6 ± 1.88) was not statistically significant (p=0.564). No correlation was observed between the duration of anesthesia, the duration of intraoperative controlled hypotension, and the duration of cerebral desaturation with MMSE scores and NIRS values. In addition, it was observed that cerebral desaturation did not occur with controlled hypotension, and there was no correlation between these two parameters.

Conclusions: The current study showed that controlled hypotensive anesthesia did not cause a decrease in cerebral oxygen saturation and cognitive functions in the short-term postoperative period. Instead, increasing was observed.

Keywords: Cognitive function, Orthognathic surgery, Controlled hypotension







OP-112

The Effects of Platelet Indices on Postoperative Pain and Edema in Bimaxillary Surgery

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Objective: Platelet volume indices (PVI) are group of platelet parameters that reflect platelet morphology, such as platelet count (PLT), mean platelet volume (MPV), platelet distribution width (PDW), plateletcrit (PCT), and platelet large cell ratio (P-LCR). In the literature, the correlation between platelet indices parameters and inflammatory diseases such as rheumatoid arthritis, ankylosing spondylitis, and diabetes mellitus have been reported. The aim of this study was to evaluate the effects of platelet indices on postoperative pain and edema after bimaxillary surgery.

Materials-Methods: This was a retrospective study included 50 patients who underwent bimaxillary surgery at the Department of Oral and Maxillofacial Surgery, Erciyes University Faculty of Dentistry between 2019 and 2020. Postoperative pain was assessed by intravenous (IV) analgesic intaken, also edema was evaluated on 3D images. The correlation between platelet indices, postoperative pain, edema, and other clinical factors were analyzed using Lasso analysis.

Results: There was a statistically significant positive correlation between PLT and postoperative edema on the first(T1-0) and third(T3-0) days (p < 0,001). A positive significant correlation was found between PCT and PLT and analgesic intaken in the first 24 hours postoperatively (p < 0.001).

Conclusion: Platelet indices such as PLT and PCT may serve as potential biomarkers to predict and manage postoperative complications in orthognathic surgery. Predictability of edema and pain contributes to the enhanced recovery after surgery.

Keywords: Orthognathic surgery, platelets, post-operative edema







OP-113 A Conservative Approach to Large Cystic Lesions Associated with Impacted Teeth in Pediatric Patients: Case Series

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Objective: In pediatric patients, large cystic lesions may develop during the process of the eruption of permanent teeth. These cysts may delay or prevent the eruption of the related teeth. This case series presents the success of conservative treatment for large cystic lesions in pediatric patients.

Case: This study consisted of a total of 7 pediatric patients who were reffered to the OMFS clinic with the complaint of swelling. All cysts showed a well-defined unilocular radiolucency on radiograph and were associated with an impacted permanent tooth. A specially designed decompression appliance was used in the treatment of lesions whose preliminary diagnosis of cystic lesion was confirmed by aspiration biopsy. Impacted permanent teeth erupted into the oral cavity without the need for enucleation and curettage in all patients, except for one patient who did not accept orthodontic treatment for the eruption of the tooth and was performed second surgery. No recurrence was detected in the follow-ups of the patients at intervals of 1 to 5 years.

Conclusion: As a conservative approach, decompression has been successfully applied in pediatric patients and has shown long-term success. The appliance we used was not only for decompression, but also as a space maintainer until the permanent tooth erupted.

Keywords: odontogenic cysts, decompression, pediatric patients







OP-114 Can Botulinum Toxin Be Effective in Huntington's Disease?

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Objective: Huntington's disease (HD) is an autosomal dominant disorder, typically characterized by chorea due to a trinucleotide repeat expansion in the HTT gene. HD can often make dental care difficult for patients that is characterized by motor, cognitive and psychiatric disorders, and a range of somatic symptoms. In the literature, prevalence, distribution and solution has been published rarely. Botulinum toxin has been using to relief the patient from the negative effects of severe bruxism and dystonies associated with the disease. In this case, we aimed to eliminate factors such as suction tic causing hyperkeratosis and ulcerative tissue formation inner side of anguli oris.

Case: A 43-year-old woman was admitted to Erciyes University Faculty of Dentistry who had been diagnosed of HD in 2014. Prescribed medications included antiepileptic for chorea. She complained about the tic of suction and bite of lower lip. We observed the chronic hyperkeratinized and ulcarative tissue at the inner side of the anguli oris. The teeth that traumatized the lower lip were extracted. Afterwards, botilunum toxins was applied to the hypertrophied muscles to reduce the frequency of tics. Also an essix plate on maxilla was prepared to prevent biting the lips. Decrease orofacial tics, and healing in wounds the chronic hyperkeratinized and ulcarative tissue on the lips were observed in within three weeks.

Conclusion: Botilinum toxin can be safely used in HD patients that increse patient's health quality.

Keywords: Huntington's disease, botilinum toxin





OP-115 Evaluation of The Correlation Between Quality Of Life And Pain Level Of Patients With Temporomandibular Joint Disorder

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Introduction: Temporomandibular joint disorders can be caused by intracapsuler and/or masticatory system problems. No matter what is the cause of the disorder, patients feel variable amount of pain and their life qualities are affected. While VAS score is used to measure pain level, OHIP-14 form which evaluates 7 different factors from physical pain to social disability with 14 questions, is used to estimates the change in life quality of patients.

Material-Methods: 36 patients who consulted Hacettepe University Department Of Oral And Maxillofacial Surgery in July 2022-April 2023, were examined and their all informations including VAS scores and OHIP-14 forms have been recorded. Up to their pre-diagnosis the patients were medicated with non-steroidal antiinflamatory (NSAI) and/or myorelaxant drugs. In first month control all clinical informations have been recorded again then the results were compared with the previous one. Results were statistically evaluated by Pearson Correlation Test.

Result: According to Pearson Correlation Test there was a significant corelation between quality of the life and the pain levels. While the patients' VAS scores are increasing, OHIP-14 forms' results are tending to increase.

Conclusion: Both VAS score and some questions of OHIP-14 form are directly aimed at pain amount. OHIP-14 form is an evaluation of functional limitation, physical pain, psychological discomfort, physical disability, psychological disability, social disability and handicap. Positive correlation between 2 parameters are predictable because the other OHIP-14 evaluation criterias are commonly affected by pain amount.

Keywords: temporomandibular joint disorder, VAS score, OHIP-14



OP-116 Management of Smile Imperfection with Botox Treatment

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Botulinum toxin, a neurotoxic protein produced by the bacteria Clostridium botulinum, when injected into the muscles, blocks the nerve signals that cause the muscles to contract, in this way relaxing the targeted muscles and reducing activity. This preparation, which is frequently used in the field of medicine, is also preferred today in smile imperfections. Smile is one of the basics of facial aesthetics. Smile correction with botox is a quick and painless procedure that produces immediate results. The effects of this can last up to 3 to 6 months. Botox treatment, which is a minimally invasive method, are frequently preferred in non-aesthetic situations such as gummy smile and asymmetric smile and create satisfactory results. In this case report, cases of botox treatments to asymmetry, whose unilateral m.depressor anguli oris was overworked, was injected with botox into the related muscle. As a result, botox treatment in smile imperfection due to muscle problems are gaining popularity with its minimal invasive, ease of practice and high patient satisfaction.

Keywords: Botox, smile asymmetry, aesthetic smile







OP-117

Retrospective Analysis of Patients With Dentigerous Cyst Associated With Mandible Wisdom Tooth Enucleated Without Tooth Extraction

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Dentigerous cyst is a developmental odontogenic cyst that involves the crown or a portion of the crown of an unerupted or impacted tooth. Mandibular third molars are the most commonly implicated teeth in this type of cyst. Dentigerous cyst can be asymptomatic and detected by an ordinary radiographic examination. These cysts develop from remnants of reduced enamel epithelium around the crown of an unerupted or impacted tooth, attached at the level of the cementoenamel junction.

In this study, patients who applied to the Department of Oral and Maxillofacial Surgery of Ege University Faculty of Dentistry in the last 5 years were retrospectively analyzed in whom the dentigerous cyst associated with impacted wisdom teeth in the mandible was enucleated without tooth extraction. In this study, it was aimed to prevent secondary fractures after cyst enucleation and tooth extraction and to avoid traumatic surgery.

As a result of the examinations and evaluations, in order to prevent post-op mandible fractures as a result of weakening of the mandible by traumatic surgery, it may be advantageous to follow up the healing of the cyst cavity by enucleation of dentigerous cysts associated with a mandibular impacted wisdom tooth without removing the tooth.

Keywords: dentigerous cyst, enucleation, impacted tooth







OP-118 A Different Horizontal augmentation technique: previous and the recent?

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Objective: Horizontal defects of the alveolar crest limit implant placements. Therefore, in the case of extensive horizontal bone resorption, the bone volume needs to be augmented before or during implant placement to obtain dental rehabilitation and maximize implant survival and success. These case reports present the onlay block technique performed with an autogenous block in reconstructing a severely atrophic mandible.

Case: Two systemically healthy patients, one 55 and the other 53 years old, were referred to our department. Planning using a wax-up and a mock-up was performed for prosthodontic reconstruction. The augmented bone was harvested at the corticocancellous bone block of the mandible alveolar crest with the help of piezosurgery and microsaw, which should be constructed. The bone block was fixated with titanium microscrews and the residual bone was filled with autogenous and xenogenous particulate grafts. The graft was covered with a resorbable collagen membrane. The integration period of the bone graft was six months. No complications occurred in the grafted area after the healing period dental implant was applied.

Conclusion: Many different techniques exist for effective bone augmentation. The approach mainly depends on the extent of the defect. Specific procedures can be performed for implant reconstruction according to the case. It is most appropriate to use an evidenced-based approach when a treatment plan is being developed for bone augmentation cases.

Keywords: Augmentation, Horizontal Bone Graft, Autogenous







OP-119 A new era for maxillofacial surgery: bio-smart implant technologies

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Maxillofacial surgery requires patient-specific implants to repair facial and jawbone deformities since standard implant solutions cannot always correspond to the aesthetic and functional requirements of these deformities, especially in exceptional cases where standard implant solutions are insufficient. It is aimed to design and produce implants fully adaptable to the irregular bone structure of the region, topologically optimized with reduced weight, and costeffective according to structural analysis results. Poly (lactic-co-glycolic acid) (PLGA)-based bone substitutes offer promising alternatives for complex craniomaxillofacial procedures as focused on this study, including the restoration of orbital fractures and ridge augmentation. Traditional methods of ridge augmentation involve harvesting bone from the patient or using bone grafts to prepare for dental implant placement, which can be costly and involve significant surgical morbidity. Additive manufacturing is a growing field in bone tissue engineering due to its reproducibility, high accuracy, and rapid production of patient-specific scaffolds. Their biocompatibility, mechanical properties, and potential to stimulate bone regeneration of additively manufactured PLGA-based scaffolds make them a valuable option compared to traditional methods that can be costly and cause surgical morbidity. This study provides the fabrication of 3D porous scaffolds through fused deposition modeling utilizing PLGA and hydroxyapatite nanoparticles (nHA). As a result, it shows the development process of patientspecific maxillofacial implants, wherein the determination of optimal nHA weight percentages and production parameters are discussed, and it confirms that the composite material could be printable reproductively. Studies have shown that 3D-printed PLGA scaffolds can effectively promote bone growth and regeneration in maxillofacial implants.

Keywords: patient specific implants, bioprinting, additive manufacturing







OP-120 Idiopathic&Neuropathic Pain After Dental Implant Surgery

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Objective: The aim of this study is to evaluate the possible causes and treatment methods of idiopathic pain after dental implant surgery, as a case series presentation and a review of the literature

Case:

Case-1: A 50-year-old male patient applied to our clinic with the complaint of pain which was started after dental implant surgery.Periodontal curettage and pocket elimination were performed around the implants but the pain persisted. The implants were removed and the patient informed us that his pain was dissappeared.

Case-2: A 55-year-old female patient applied to our clinic with the complaint of pain which was started 2 years ago, after the dental implant placement in the #24-25 region. Attempts were made to eliminate all possible dental causes and to relieve pain. As the pain persisted, the patient was referred to neurology clinic. An intracranial tumor was detected and the patient underwent a tumor surgery. In the long-term follow-ups, the patient stated that the pain was resolved post-operatively.

Case-3: A 42-year-old male patient was referred to our clinic with the complaint of a 'strange feeling' in the form of tingling and pain around the implants in the right mandible. Since the patient was bruxist, an occlusal splint was prepared, botulinum toxin-A injections and occlusal rehabilitation were applied. The patient stated that most of his pain disappeared during the control sessions.

Conclusion: Definitive treatment of idiopathic pain requires an accurate identification of the possible source of the pain and elimination on a patient basis.

Keywords: Chronic pain, Dental implant, Idiopathic pain





OP-121

Evaluation of Prognostic Factors for Permanent Fistula After Secondary Alveolar Bone Graft in Patients with Cleft Palate

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Objective: The aim of this study is to evaluate the postoperative fistula rate in patients with cleft palate undergoing secondary alveolar bone grafting and to show the factors that increase the risk of fistula formation.

Materials-Methods: 24 patients with cleft lip and palate who underwent alveolar bone grafting operation at Medipol Mega University Hospital Oral and Maxillofacial Surgery Clinic between 2016-2022 were included in this retrospective study. The medical records of the patients were obtained from anamnesis forms filled by the physician, radiographs and photographs taken before and after the operation. Gender, age, cleft type, presence of syndrome, cleft width, presence of oronasal fistula and number of previous grafts were obtained from medical records. Multivariate analysis was performed to identify predisposing factors in fistula formation.

Results: Secondary alveolar bone graft was applied to 24 patients with cleft lip and palate. Autogenous bone graft was used in all of these patients. While all patients had an oronasal fistula before surgery, the recurrence rate after fistula repair was 20.8%. Cleft width more than 13 mm, continued orthodontic treatment after surgery, and age have been shown to be important risk factors for fistula formation.

Conclusion: According to the results of this study, a high incidence of fistula formation was observed following cleft palate repair. This study shows that cleft width is the most important determining factor in fistula occurrence after cleft palate repair.

Keywords: alveolar cleft repair, cleft palate, oronasal fistula







POSTER PRESENTATIONS



PP-002

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Histopathological examination of residual cysts in different jaws treated with post-decompression enuclation and direct enucleation in the same patient

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Objective: The aim of this study is to investigate the histopathological differences between cysts enucleated after marsupialization and cysts enucleated directly.

Materials-Methods: In the patient with two different residual cysts in the maxilla and mandible, the cyst in the mandible was enucleated after six months of marsupialization, and the cyst in the maxilla was enucleated directly. The specimens taken were examined histologically and the differences in the epithelium were compared histologically.

Results: In the histological sections of the first tissue excised, focal inflammatory granulation tissue formation was observed around the cystic formation lined with stratified squamous epithelium and containing keratinous material. In the histological sections of the second tissue, more intense inflammation, cholesterol clefts, focal foreign body presence and a related reaction were observed around the cystic formation with a relatively thin wall, lined with stratified squamous epithelium, and containing keratinous material.

Conclusion: This study showed us that marsupialization causes epithelial thickening while reducing inflammation in the cyst epithelium.

Keywords: reziduel cysts, marsupialization







PP-003 Bio-Oss Fortified with Levan Hydrogel for Bone Regeneration

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Objective: Guided Bone Regeneration (GBR) is one of the most popular methods for repairing bone defects. Despite the effort, researchers could not find any "perfect" bone reconstruction material yet because of limited biomaterial production and the high costs of those who dominate the market. Microbial biopolymers hold popularity with their production easiness in high yield with low cost. In this study, levan hydrogels mixed with bone particles are tested from the perspective of the bone regeneration process in-vitro as a preliminary scan before in-vivo studies to reduce regeneration time, amount of bone graft used, and cost of the procedure.

Materials-Methods: Levan polysaccharide is synthesized enzymatically by the levan sucrase enzyme of Halomonas Smyrnensis, molecular weight reduced with microwave acid hydrolysis and crosslinked with 1,4-butanediol diglycidyl ether (BDDE) and characterized. Hydrogels alone or mixed with Bio-Oss® (Geistlich Pharma AG, Wolhusen, Switzerland) are tested with human osteoblast cells (HOB) for 24 hours in-vitro, and cell proliferation is observed.

Results: Cell viability results fortified with levan hydrogels showed greater viability than Bio-Oss® and the control group and concluded as a biomaterial to be used in bone regeneration.

Conclusion: Levan hydrogels with biocompatibility and high osteoblast cell proliferative ability are strong candidates to be used in guided bone regeneration applications in the future.

Keywords: Levan, cell viability, in-vitro







PP-004

The effect of triangular cross-section neck design on crestal bone stability in the anterior mandible: A retrospective study with a 5-year follow-up

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Objectives: The aim of this study was to compare crestal bone loss (CBL) and buccal bone thickness (BBT) around triangular cross-section neck (TN) to round neck (RN) implants in the anterior mandible, using cone-beam computed tomography.

Material-Methods: The present study study was initially designed as a prospective 1-year randomized controlled study, then extended with a 5-year retrospective evaluation of the patients' records. In an initial one-year study, a total of twenty edentulous patients receiving 40 implants with similar diameters were randomly assigned to the RN and TN groups in a split-mouth design. Pocket probing depths (PPD), plaque index (PI), and gingival index (GI) were recorded at postoperative month 12. CBL and BBT at three levels (0, -2, and -4 mm) were evaluated one year after loading. 5 years after the inclusion, as patients were recalled for clinical and radiographic monitoring, PPD, PI, GI, CBL, and BBT were also recorded.

Results: The clinical and radiological records of seventeen patients were reviewed. There were no significant differences with respect to PPD, PI, and GI, and BBT values between study groups after a mean of 56.9 months follow-up (p > 0.05). The mean CBL was lower in TN (-0.71 ± 0.73 mm) compared to RN (-1.08 ± 0.90 mm) at the final follow-up visit (p < 0.01).

Conclusions: The outcomes of the this study indicated a better crestal bone preservation in the implants with unique neck design compared to conventional neck design in the anterior mandible.

Keywords: buccal bone thickness, crestal bone loss, triangular cross-section neck





PP-005 The effect of the guide hole length on accuracy of implant placement

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Objective: Implant guide surgery accuracy can be influenced by various factors. In this study, we aim to investigate the effects of the length of the guide holes on surgical accuracy.

Materials-Methods: A total of 10 maxillary partial edentulous models of Kennedy class II and III, respectively, were prepared. Six implants with same size were installed to the same position of 10 models using digitally pre-fabricated surgical guide. Five groups were set up according to the length setting of guide hole between one and five millimeters. To compare the planned implant positions with the actual implant positions after the placement, the coronal and apical distance errors of the implants were evaluated. ANOVA, Kruskal-Wallis test, and Fisher's exact test were used for statistical analysis.

Results: The coronal and apical mean distance errors were 0.90 ± 0.29 and 1.46 ± 0.60 mm, respectively. Apical distance error was statistically significantly smaller in the group IV (1.17 ± 0.26 mm) with a longer guide hole than in the group I (1.99 ± 0.74 mm) (p=0.021). No significant differences were observed in other measurements such as the errors of coronal distance and directional tendency. When the length of the guide hole was set separately at the mesial and distal position, no difference was observed in the resulting direction of the placement.

Conclusion: In this study, significantly more accurate results were obtained in the case of having a length of at least 5 mm on one side of the guide hole compared to the case of having only 1 mm.

Keywords: Implant; guide



PP-006

Evaluation of Mandibular Positional Changes after BSSRO in Skeletal Class II and Class III Surgery First Approach Patients

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Objective: The aim of this study was to predict and compare postoperative changes of mandibular position between mandibular setback surgery and advancement surgery in a surgery-first approach (SFA).

Materials-Methods: The study population included patients who underwent mandibular setback or advancement surgery using bilateral sagittal split ramus osteotomy, with or without Le Fort I osteotomy. The patients were divided into two groups: mandibular setback surgery and advancement surgery.

Surgical and postoperative mandibular positional changes were evaluated by lateral cephalograms and CTs taken within 2 months before surgery (T0), 1 week after surgery (T1), and after the debonding procedure (T2). The postoperative mandibular positional changes were predicted from the increase in vertical dimension (VD) in surgical occlusion and the counterclockwise rotation to the preoperative VD on the lateral cephalograms and CT at T1.

Results: Nine SFA patients with mandibular setback surgery and six with advancement surgery were evaluated and significant mandibular changes from T0 to T1 and from T1 to T2 were observed. Negative correlation between horizontal surgical changes and postoperative horizontal changes was present in both groups. The difference between the predicted and actual amount of postoperative mandibular movement was significant in the mandibular advancement surgery group. There was no significant difference between postoperative mandibular rotational movement and predicted values from the geometric method.

Conclusion: Postoperative mandibular relapse appeared much larger in the mandibular advancement surgery group than in the setback surgery group. Therefore, it is more important to consider the postoperative mandibular position change in mandibular advancement surgery in a SFA.

Keywords: BSSRO, SFA, relapse







PP-007 Squamous Cell Carcinoma of the Lower Lip

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Squamous cell carcinoma (SCC) of the lips is one of the most common oral cancers. Squamous cell cancer of the lip and oral cavity is a malignancy that usually occurs in the 6th decade of life and is more common in men than in women. Lip lesions are usually diagnosed at an early stage because of their highly visible location and slow growth pattern. Lower lip is more common in squamous cell carcinoma (SCC) of the lip. A 5-year survival rate approaching 90% has been reported in the literature with wide local excision in the early period. Our patient applied to Istanbul Health Sciences University, Hamidiye Faculty of Dentistry, Department of Oral, Dental and Maxillofacial Surgery for a 0.75-diameter crusted lesion on his lower lip for 1 year. As a result of the histopathological examination, it was revealed that the lesion was squamous cell carcinoma. The aim of our presentation, which we prepared as a case report, is to evaluate the squamous cell carcinoma of the lower lip of a 65-year-old male patient and our approach to the patient, taking the literature studies as a reference.

Keywords: Squamous Cell Carcinoma, Lower Lip







PP-009 Treatment Of The Patient With Cheek Biting By Bichectomy

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Objective: Buccal fat pad removal or bichectomy is one of the treatment methods applied to patients who experience cheek biting trauma during the chewing process and patients who want to obtain a thinner lower face in the medial cheek region. Female patients search for buccal fat pad removal more for esthetic reasons and male patients for functional purposes.

Case: A 23 years old male patient attended to our clinic with the complaint cheek biting trauma. After clinical examination buccal fat pad removal was planned under local anesthesia. A 1.5 cm incision was made in the oral mucosa 1 cm below the papilla of the Stenon duct. The buccinator muscle was dissected with a clamp. After bishat became visible, the capsule was separated by dissection and the fat was exposed by external digital pressure. The equality of the fat tissues excised from the right and left sides was measured with a syringe. Primary closure was performed. Cold compresses and bandages were applied for 3 days postoperatively. The patient was called for control in the 1st week, 1st month and 3rd month and no complications was observed.

Conclusion: The primary function of the buccal fat pad is to allow a smoother muscular grind-ing and assists suckling in children, a reason that explains the large volume of cheeks in infants. Excess fat tissue causes complaints, especially cheek biting. Bichectomy is one of the effective motives used in cheek biting.

Keywords: Bichectomy





PP-010 Atrophic Mandible Fracture and Osteomyelitis in a Patient with Bulimia Neurosis

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Objective: Mandible fractures are common fractures in the maxillofacial area. Although it mostly occurs due to traffic accidents, falls, beatings and pathological causes (cysts, tumors, etc.), it can also occur spontaneously in atrophic jaws.

Case: A 54-year-old female patient was referred to our clinic with complaints of pain in the implant area in the lower jaw and paresthesia on the left side of the lower lip for 6 months. The patient with bulimia nervosa weighed only 27 kilograms.

The patient was repeatedly given antibiotics in view of peri-implantitis. However, panoramic and CBCT images showed fracture in the mandible corpus and irregular lytic lesion in the relevant region.

The patient was diagnosed with osteomyelitis as a result of biopsy and was operated for open fixation by starting clindamycin. The fracture line was reached by extraoral approach and open reduction-internal fixation was performed with a 4-hole reconstruction plate.

The paresthesia completely disappeared in the 3rd month after the operation and there was no negativity in the fracture line during the 18-month control.

Conclusion: Atrophic mandible is a condition that occurs at an older age. However, due to bulimia nervosa, the patient's inability to feed adequately caused atrophy in all tissues. The fact that the 54-year-old patient weighed only 27 kg made the operation difficult both in terms of anesthesia and surgery.

The patient, who was referred to psychiatry for psychological treatment, refused to receive treatment. The treatment was completed by renewing the patient's existing overdenture prosthesis.

Keywords: mandible fracture, athrophy, bulimia nevroza





PP-011

Prophylactic Miniplate Osteosynthesis After Impacted Wisdom Tooth Extraction Associated With Dentigerous Cyst In Atrophic Mandibula:A Case Report

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Objective: There is a possibility of fracture in the mandibular angulus during or after the extraction of impacted mandibular wisdom teeth. Factors such as gender, age, pathological formation around the teeth, and remaining intact bone volume area effective on complications that may occur.

Case: A 58-year-old, systemically healthy female patient applied to our clinic with complaints of swelling and pain in the posterior region of the right mandibula. As a result of clinical and radiographic examination, dentigerous cyst formation associated with impacted tooth was observed in the mandibula angulus region. After 1 week of antibiotic therapy, impacted mandibular wisdom tooth extraction and cyst enucleation were planned under general anesthesia. In the examined CT images, it was seen that the tooth was associated with the lower edge of the mandible angulus. Intact bone around the wisdom tooth was very low. The possibility of intraoperative or post-operative fracture was predicted.Therefore, miniplate osteosynthesis was planned for prophylactic purposes after tooth extraction. According to the Champy technique, a 6-hole long bar miniplate was applied along the external oblique edge (Ramed, 1 mm).

Conclusion: If there is a risk of fracture after tooth extraction or pathological mass removal, miniplate or reconstruction plate can be applied according to the amount of remaining bone volume.

Keywords: dentigerous cyst, impacted wisdom tooth extraction, miniplate osteosynthesis







PP-012

Reconstruction of maxilla after cyst enucleation with titanium mesh and Plasma-Rich Fibrin (PRF): Report of a case

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Guided bone regeneration (GBR) is an effective and simple method of bone augmentation used to reconstruct the alveolar ridge when a bone defect occurs at the implant site. Titanium mesh has expanded the indications of GBR technology because of its excellent mechanical properties and biocompatibility so that GBR technology can be used for large alveolar ridge defects and achieve excellent and stable bone augmentation results.

In this case, a big defect with 3x3x2cm wide was observed in the left maxillary canine and premolar regions extending buccopalatally and anteroposteriorly. Excisional biopsy was performed from the cystic lesion and no malignancy was detected. Bone augmentation using titanium mesh was planned 12 months after this operation. Allograft and titanium mesh were fixed with screws and prf was used both with the graft and as membrane barrier. At the 6-months follow-up, alveolar bone with sufficient thickness and height was obtained for the implant insertion with optimal results.

Keywords: titanyum mesh, platelet-rich fibrin, allograft







PP-013

Alveolar Segmental Sandwich Osteotomy For Posterior Maxillary and Mandibular Vertical Augmentation: A Case Report

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Objective: Atrophic posterior maxilla may pose a significant challenge for dental implant treatment. Various treatments are available for augmentation of the vertically defective. Segmental sandwich osteotomy is an alternative option for dental implant treatment that provided reconstruction of the bone defect (1,2). In recent years, iliac bone grafting has become one of the most widely used autogenous bone grafting techniques (3). In this case, we present segmental sandwich osteotomy with interpositional iliac graft for the treatment of vertical bone defect.

Case: A 67-year-old male patient has been admitted to our clinic for dental implant treatment. As a result of radiographic and clinical examination, it was seen that the vertical bone volume was insufficient in the left maxillary and right mandibular areas where implants were planned (Figure 1). Segmental sandwich osteotomy with interpositional iliac graft planned for the treatment of vertical bone defect. Iliac bone harvesting were performed under general anesthesia (Figure 2, 3). Segmental osteotomy was performed in the left maxillary posterior region. The iliac graft was placed in the interpositional region and the plate was fixed using screws (Figure 4). The iliac graft was fixed to the right mandibular region with a screw and plate (Figure 5). Implants were placed at 6 months post-operative (Figure 6,7,8).

Conclusion: Studies have shown that segmental sandwich osteotomy is a relatively simple technique that provides surgical success and a high level of predictability(4). In the treatment of moderate to severe vertical alveolar bone loss, segmental sandwich osteomies with iliac grafts can show successful results.

Keywords: dental implants, iliac graft





PP-014

Combined restoration of severely atrophic maxilla with extrasinus zygomatic implants and endosseous dental implants without bone augmentation

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Objective: The restoration of the atrophic maxilla using endosseous dental implants and extrasinus zygomatic implants is discussed, aiming to avoid various disadvantages of augmentation methods instead of using endosseous dental implants and traditional augmentation methods in the maxilla, which has been severely atrophied due to age, anatomical variation, systemic and local factors.

Methods-Materials: The patient has atrophic maxilla and without using any augmentation method, four endosseous dental implants in the anterior maxilla and one zygomatic implant in each of the maxillary right and left posterior regions passing through the outer wall of the maxillary sinus were placed.

Results: The osteointegration of the implants was successful and the patient did not have any signs of sinusitis, mucositis or any other intraoperative complication. The patient's prosthesis is completed. No loosening was observed in the implants screws.

Conclusions: Successful osseointegration can be achieved by combining zygomatic implants made from the outer wall of the maxillary sinus with endosseous dental implants as an alternative to existing augmentation methods in severely atrophic maxilla. It has predictable results with careful preparation of the operation field, determination of the appropriate technique based on clinical and radiological examinations, and the experience of the operating surgeon.

Keywords: Endosseous dental implant, maxillary resorption, zygomatic implant







PP-015 Management of necrotic bone after patient's self application of cologne: A Rare Case Report

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Objective: Numerous painkillers are used to relieve toothaches. Patients may apply some substances directly on the affected area(the teeth,gums or skin) to ease the toothache and therefore those toxic substance may cause unwanted effects.(1,2) This case reports the application of cologne directly to the gums of a patient.

Case: 48 years-old female patient admitted to our clinic with pain in the maxillary molar area after direct placement of cologne(%80 alcohol) in the affected area. Clinical examinations showed the bone related to this area was necrotic and the gingiva was hyperemic. It was learned that teeth number 27 and 28 was exctracted due to caries and the area was primarily closed with bichatte adipose tissue(Figure1) but exposed necrotic bone site was visible in the 1st month on our clinical examination.(Figure2) In our clinical attempt, maxillary first molar which may be the cause of infection, was extracted and. The exposed necrotic bone was smoothly drilled with a diamond bur and the pedicled connective tissue graft from the palatal region was rotated and covered the exposed bone and sutured with 4/0 prolene.(Figure3,4) The wound was completely healed and symptom free. Postoperative healing and epithelization in the relevant area in the 1st week (Figure 5) and 1st month was uneventfull.(Figure 6)

Conclusion: Non-dental applications on the oral mucosa may be harmful and it is necessary to deepen the anamnesis to diagnose the case in the clinical examination and to be able to treat it.

Keywords: Cologne, Necrotic bone





PP-016

Horizontal Ridge Augmentation with a combination of Expanded-Polytetrafluoroethylene Titanium-Reinforced Membrane and Particulate Autogenous Bone Graft and Xenograft: A Case Report

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Purpose: Severely atrophic alveolar crests represent a great challenge for implant-prosthetic rehabilitations. The use of guided bone regeneration (GBR) with resorbable and non-resorbable membranes for vertical and horizontal alveolar bone augmentation is a predictable surgical method to correct the bone defects before implant placement. The aim of this case report is to present horizontal ridge augmentation with GBR using expanded-polytetrafluoroethylene (e-PTFE) non-resorbable titanium-reinforced membrane and combination of particulate autogenous bone and bovine cancellous xenograft.

Case: A 40-year-old female patient with no systemic disease was referred to our clinic with a chief complaint of edentulism in the posterior maxilla. As a result of clinical and radiographic examination using cone-beam computed tomography, severe horizontal bone loss in the maxilla posterior region was determined. Horizontal bone defect was augmented with a GBR protocol that included the use of a 1:1 mixture of particulate autogenous and bovine cancellous xenografts, e-PTFE nonresorbable titanium-reinforced membranes and titanium pins. The flap was released and closed primarily with a 4.0 propylene suture. After 6 months, four dental implants were inserted simultaneously with the removal of the membrane.

Conclusion: Despite the titanium-reinforced PTFE membranes was introduced to treat the vertical defects, these may be used in rehabilitation of severe horizontal defects. The most common complication of these is membrane exposure. Therefore, flap design, membrane fixation, suturing, and postoperative care are essential for success in guided bone regeneration with titanium-reinforced e-PTFE membranes.

Keywords: Augmentation, Guided Bone Regeneration, Polytetrafluoroethylene Membrane







PP-017 Surgical Resection of Osteochondroma in the Mandibular Condyle Region: A Case Report

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Objective: Despite osteochondroma is the most common benign bone tumor, this entity is rarely seen in the maxillofacial region, particularly in the condyle of the mandible. The diagnosis and the treatment of condylar osteochondroma is presented in this case report.

Case: A 29-year-old male patient was referred to our clinic with complaints of facial asymmetry, mandibular deviation, malocclusion, limitation in mouth opening, and pain. A 23x15x15Mm, radiopaque mass around the left condyle was observed in the radiological examination with cone-beam computed tomography. The temporomandibular joint (TMJ) region was exposed using preauricular approach under general anesthesia. Condylectomy was performed with the resection of the tumor and fat pad was placed in the TMJ region, which was harvested from the abdominal region. Histopathological examination confirmed the diagnosis of osteochondroma. Four weeks after the surgical excision, ideal occlusion and mouth opening was created without facial asymmetry and pain. However, facial paralysis has occurred unilaterally on the left side of the face in the early postoperative period. Facial paralysis was healing unevenfully following to corticosteroid therapy and physical therapy after 3 months of the surgery. No recurrence was observed in the follow-up of sixteen months.

Conclusion: Although osteochondroma is a very rare tumor in the maxillofacial region, early diagnosis and proper treatment of this entity are crucial to enhance the quality of life of patients and to avoid the risk of potential malignant transformation. Surgical excision and condylectomy is an effective treatment method with low recurrence rates, which was reported between 1-2% in the scientific literature.

Keywords: Benign Bone Tumor, Mandibular Condyle, Osteochondroma







PP-018 Treatment of Osteoid Osteoma in the Mandible: A Rare Case Report

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Objective: Osteoid osteoma is a benign tumor of the bones, which is rarely seen in the jaws. Typically, an osteoid osteoma is found in individuals between the ages of 5 and 25 years and males are three times more likely to be affected. In this case report, a case of osteoid osteoma localized in mandible and the treatment method will be presented.

Case: A 7- year- old female patient without any systemic disease was referred to our faculty with complaints of pain and swelling in the inferior border of the right mandible. Cone-beam computed tomography demonstrated an expansive, round, mixed radiopaque/radiolucent lesion surrounded by soft tissue capsule. In the clinical examination, swelling and expansion were also observed in the posterior region of the mandible. Subsequently, acetyl salicylic acid was prescribed the patient and her pain relieved. Surgical excision was performed under general anesthesia. Histopathological examination revealed that the lesion was osteoid osteoma. The patient recovered uneventfully after surgery and the patient is followed up routinely.

Conclusion: Osteoid osteoma has to be differentiated from other bone lesions for proper treatment. Several bone tumors may resemble osteoid osteoma clinically, radiologically, and histologically. Hence, through knowledge is essential in the management of this rare entity. Proper treatment with surgical resection eliminates the risk of recurrence and results in a good prognosis.

Keywords: Benign Bone Tumors, Mandible, Osteoid Osteoma






PP-019

Management of palatal bone exposure after rapid maxillary expansion with Hyrax expander

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Objective: Rapid maxillary expansion has been used in the orthodontic treatments. The complications of the usage of those rapid expansion appliances such as severe pain, pressure necrosis of soft tissue, bending of alveolar bone, uncontrolled relapse etc. can be observed in patients(1,2).

Case: 15 years old female patient with the exposed palatal bone after the usage of a rapid palatal expansion appliance was referred to our clinic by orthodontic department. Clinical examinations of the patient showed an exposed bone in the upper palatal bone accompanied with hyperemic gingival surrounding tissue and pus drainage(Figure 1). The exposed area was copiously irrigated with povidone-iodine. Kenacort orabase pomade per day and regular irrigation of the area with povidone-iodine were advised to the patient. The patient was seen in the second week, and 3rd weeks (Figure 2,3). The full recovery was seen in 6th week(Figure 4).

Conclusion: It is necessary to follow the change in the palatal bone and in the soft tissue of the palate to avoid any unpredictable results.

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Keywords: rapid maxillary expansion, exposed palatal bone







PP-020 Florid Cemento-Osseous Dysplasia of the Mandible: Two Case Reports

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Objective: Florid cemento-osseous dysplasia (FCOD) is a rare multifocal dysplastic benign lesion. It consists of cellular fibrous connective tissue containing bone and cement-like tissue. FCOD, which are usually asymptomatic, are diagnosed by radiographic examination. Differential diagnosis of FCOD is so important. In this report, we aimed to present two cases of FCOD who applied to our clinic with different complaints.

Case 1: A 37-years old female patient applied to our clinic with the complaint of pain in her mandible. The panoramic radiography revealed radiopaque masses of different sizes in both quadrants of the mandible. A biopsy was done and lesions was diagnosed as FCOD. Lesions were enucleated under local anaesthesia. After 4 years, small radiopaque lesions were seen again in the 32 and 44 teeth area of the patient. After re-operation, regular follow-up was recommended.

Case 2: A 64-years old female patient referred to our clinic with the complaint of infection and pain in the anterior region of the mandible. Panoramic radiography showed a radiolucent-radiopaque masses in mandible and maxilla. The lesion in mandible were removed under local anaesthesia and regular follow-up was recommended.

Conclusion: It is important that clinicians are knowledgeable about fibro-osseous lesions. Misdiagnosis may result unnecessary endodontic treatment or incorrect surgical intervention. Knowledge of clinical and radiographic features in conjunction with histopathology helps in definitive diagnosis. Treatment is not required unless symptomatic and prognosis is good. In symptomatic cases, administration of antibiotics is indicated, but sometimes requiring surgical debridement and enucleation.

Keywords: Florid cemento-osseous dysplasia, fibrosseous lesion, mandible







PP-021

Palatal Mucosa Necrosis due to Accidental Sodium Hypochlorite Injection Instead of Local Anesthetic Solution for a Palatal Anesthesia: A Case Report

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Objective: Sodium hypochlorite is one of the most commonly used irrigation solutions in endodontic treatment. It has broad antimicrobial activity and toxic to vital tissues. If sodium hypoclorite is accidentally injected into vital tissues, it causes serious complications. This report present a case in which sodium hypochlorite was accidently injected into the palatal mucosa instead of local anesthetic solution.

Case: An adult female patient was referred to Department of Oral and Maxillofacial Surgery, Mersin University to private clinic with a complaint of intraoral burning and pain in the left maxilla. It was learned that the dentist accidentally injected sodium hypochlorite instead of local anesthetic solution while performing palatal anesthesia for tooth extraction. In intraoral examination, necrotic areas on the palatal mucosa on left side was revealed. The surrounding area was purple and swollen. Surgical debridement of necrotic tissue was done. Steroids, antibiotics, analgesics and antiseptic solutions were prescribed. The first month, she was called every day for control and necrotic area was irrigated with antiseptic solution. Patient was followed up for 1 year with no evidence of further necrosis.

Conclusion: Sodium hypoclorite is highly irritant when injected into vital tissues. Dentists should be careful to avoid the misuse of sodyum hypoclorite. Understanding the potential complications of this condition will aid in the management of sodium hypochlorite accident.

Keywords: Sodium hypochlorite, palatal necrosis, accidental injection







PP-022 Management of a Non-union Complication After Le Fort 1 Osteotomy: A Rare Case Report

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Objective: In this case report, we will present a rare non-union complication and its management in the post-operative period following to maxillary impaction with Le Fort 1 osteotomy.

Case: A 23- year- old male patient without any systemic disease was referred to our clinic with complaints of gummy smile and dental and skeletal malocclusion. In the clinical and radiological examinations, maxillary overgrowth, open-bite, gummy smile, upper lip incompetence, and Class 2 dental and skeletal malocclusion were observed. Combined Le Fort 1 osteotomy, bilateral sagittal split osteotomies, and genioplasty were performed. Maxilla was repositioned superiorly by Le Fort 1 osteotomy with 6 mm impaction. About 6 months after the surgery, maxillary non-union with maxillary mobility, pain, and pus drainage were observed in the maxilla and the patient was re-operated. During the surgical procedure, sinus infection, which was determined as the potential cause of maxillary non-union, was observed in the left maxillary sinus. Granulation tissues were debrided, bone grafting with bone block allograft and rigid fixation by using titanium mini-plates and screws were performed. The patient recovered uneventfully after the second surgery.

Conclusion: Non-union, which prolongs the treatment period, is a rare complication in orthognathic surgery. Despite the vast majority of the non-union cases of the maxilla occurs following to inferior positioning of the maxilla, this complication may arise after the impaction of the maxilla due to the infection. The management of this complication involves the debridement of the granulation tissue, bone grafting, and a stronger rigid stabilization of the maxilla.

Keywords: Complication, Non-union, Orthognathic Surgery







PP-023 Nasolabial Cyst: A Case Report

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Objective: Nasolabial cysts are one of the rare non-odonthogenic cysts of the maxillofacial region cysts. Nasolabial cysts are so tissue lesions arising from epithelial remnants of the nasolacrimal duct. They are rare benign non-odontogenic lesions of nasolabial region. Because of their frequent expansion, they cause aesthetic problems. therefore, they present symptomatic findings in the early period. Nasolabial cysts are usually unilateral and they are more common seem in women. These lesions may be asymptomatic or they may cause nasal obstruction, pain and facial asymmetry. Surgical excision is the first line treatment; it proves the diagnosis and prevents recurrence.

Case: There is relationship with the nasal base and the maxilla sinus in the mrg and slight resorption of the maxilla anterior bone in the CT image. In a 41 -year -old female patient who applied to our clinic, we present a nasolabial cyst that gradually grows, slightly painful and causing intraoral swelling in the Maxilla left anterior. After local anesthesia, a incision from vestibul was made and the cyst was exposed with dissection scissors and extracted. The laceration formed in the nasal mucosa was sutured with 4-0 vicryl and the flap was closed primary. Later, she was called for 1 week, 1 month and 3 months. No complications and relapse were seen.

Conclusion: The nasolabial cyst is a rare soft-tissue cyst. Complete surgical excision using an intraoral approach performed to our case, which considered with the complete surgical removal of the best treatment for the nasolabial cysts with a rare recurrence rate.

Keywords: cyst, nasolabial cyst, maxillofacial cysts







PP-024 Diagnosis Of Inflammatory Bowel Disease After Oral Lesion: A Case Report

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Objective: Inflammatory bowel disease is a chronic recurrent inflammatory disorder with symptoms such as abdominal pain, diarrhea, rectal bleeding, weight loss, and fatigue. In this case report, the diagnosis of inflammatory bowel disease after oral lesions is reported.

Case: A 59-year-old male patient was referred to our clinic for oral lesions. In the anamnesis, it was reported that he had smoked a pack of cigarettes a day for 20 years, and had intestinal symptoms such as prolonged diarrhea and abdominal pain. On clinical examination, a white, irregular border, asymptomatic lesion in the left retromolar area; A radiating, white, asymptomatic lesion with irregular borders was observed in the right buccal mucosa. An incisional biopsy was taken from the inside of the right buccal mucosa. It was defined as chronic inflammation in the histopathological examination of the lesion. Histopathological examination of the biopsy taken from the left side revealed epithelial hyperplasia and verrucous proliferation, and diffuse inflammatory cell infiltration in the lamina propria, and a diagnosis of verricous leukoplakia was made. The patient was referred in terms of symptoms and HLA B*27 was found positive in DNA analysis and examined for inflammatory bowel diseases. The patient was diagnosed with Chron's disease.

Conclusion: In inflammatory bowel diseases, oral mucosal lesions may precede intestinal symptoms in 5-10% of cases. There is a risk of developing malignancy in theese lesions. For these reasons, oral lesions should be evaluated in terms of systemic diseases and should be followed closely due to their malignant potential.

Keywords: inflammatory bowel disease, leukoplakia, oral pathology







PP-025

Horizontal Ridge Augmentation Using Sausage Tecnique with a Combination of Paritculate Autogeneous Bone Graft and Deproteinized Particulate Bovine Bone Graft: A Case Series

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Objective: Guided bone regeneration is a bone augmentation technique to place dental implants on atrophic alveolar crests. Sausage technique is defined as a modification of the GBR. The aim of this case series is to present two cases treated with sausage technique using particulate autogeneous bone graft and deproteinized particulate bovine bone greft and dental implants in maxillary.

Case: Two female patients was referred to our clinic with a chief complaint of edentulism. Insufficient horizontal bone width was observed in both patients in the clinical and radiological examination using cone-beam computed tomography (CBCT). Following to reflection of full-thickness flap, decortication was performed in the maxillary anterior regions of both patients. Particulate autogenous bone grafts were collected from the maxillary tuberosity region and mixed with deproteinized particulate bovine bone greft at a ratio of 1/1. Bone grafts were covered with resorbable collagen membranes using 15 titanium pins and 7 titanium pins in the first and second patients, respectively. After a 7 months of healing period, 4 implants were inserted in the maxillary anterior region in the second patient.

Conclusion: The sausage technique is a less invasive surgical method compare to intraoral bone block graft technique, therefore, it reduces donor site morbidity and also decreases patient discomfort. Moreover, significant improvement of horizontal bone gain may be obtained with this technique.

Keywords: Augmentation, Dental Implant, Sausage Technique







PP-026 Management of Isolated Zygomatic Arc Fracture with Keen Approach

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Objective: Zygomatic arch fractures may occur as isolated fractures or as part of facial fractures. Isolated displaced fractures of the zygomatic arch cause prominent lateral facial depression. Displaced zygomatic arch fractures should be reduced to improve facial aesthetics.

Case: A 58-year-old male patient was referred to our clinic for a right isolated zygomatic arch fracture after traffic accident. In the anamnesis taken from the patient, it was learned that he had prostate cancer and that he would have a surgical operation for cancer. Clinically, tenderness to palpation, pain, crepitation and cosmetic deformation were observed in the right malar region. Radiologically, the fracture lines were M-shaped medially displaced. Because the patient had pain and the fracture line was displaced, it was decided to reduce the fracture line. The patient was operated under local anesthesia because the patient was going to receive general anesthesia in the near future and the fracture line could be reached inside the mouth. A vestibular incision was made from the right maxilla buccal region and the fracture line was reduced by reaching the medial zygomatic arch with the help of a long periosteal elevator. No complications were observed in the six-month follow-up of the patient.

Conclusion: Various techniques such as Gillies method, Keen approach, lateral coronoid approach and percutaneous approach can be used in isolated zygomatic arch fractures. Each case should be evaluated on its own and the treatment to be applied should be chosen according to the fracture type and the patient's condition.

Keywords: maxillofacial trauma, zygomatic arch fracture, keen approach







PP-027

Evaluation of the intraoperative and postoperative complications of orthognathic surgery

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Objective: The purpose of this study was to evaluate the incidence of complications in patients undergoing orthognathic surgery.

Methods: 112 patients who undergone orthognathic surgery in Kocaeli University Department of Oral and Maxillofacial Surgery between 2014 and 2021 were retrospectively reviewed. Demographic variables of patients, follow-up period, type of malocclusion and operation were recorded. All surgical complications were divided into two subgroups as intraoperative or postoperative complications and evaluated retrospectively.

Results: The mean age of 112 patients (69 female, 43 male) was 24.4 ± 5.5 (ranging from 16 to 47). The most common intraoperative complication was the bad split (5 cases, 4.5%), Severe hemorrhage due to rupture of facial artery (1 case, 0.9%), dissection of inferior alveolar nerve (1 case, 0.9%), and dental damage (1 case, 0.9%) were also observed. The most frequent postoperative complication was the neurosensorial deficit (29 cases, 25.9%), followed by infection (6 cases, 5.4%), extraoral scar formation (5 cases, 4.5%), fracture of fixation material (2 cases, 1.8%), maxillary non-union (2 cases, 1.8%), postoperative nasal hemorrhage (1 case, 0.9%), and failure of fixation material (1 case, 0.9%). No fatal complication has occurred.

Conclusion: Despite the majority of the complications during and following orthognathic surgery is not life-threatening and is manageable, early recognition and appropriate treatment of these is essential in order to minimize adverse outcomes.

Keywords: complication; Le Fort I osteotomy; orthognathic surgery; sagittal split osteotomy







PP-028

Simultaneous external sinus lifting and implantation to the patient who was operated with Caldwell- Luc operation

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Objective: The aim of this study is to show doingexternal sinus lifting and simultaneous implantation in one stage who was operated Caldwell- Luc operation.

Material-Method: Schneiderian membrane perforation occurred in the patient who had a sinus lift failure before. Graft material was migrated into the patient's maxillary sinus. When the patient came to our clinic, caldwell luc operation was performed and waited for 4 months. In the second appointment, an external sinus lift and dental implantation was performed.

Conclusion: We concluded that simultaneous external lifting and implantation can be performed in one stage by lift the connective tissue formed instead of the schneiderian membrane in the patient who operated with caldwell luc operation.

Keywords: caldwell luc, dental implant, external sinus lifting







PP-029

Treatment of a Patient with Cleft Lip and Palate by Autogenous Anterior Iliac Crest Grafting and Orthognathic Surgery: A Case Report

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Purpose: Scarring from surgeries of lip and palate in cleft lip and palate (CLP) patients may disrupt the normal maxillary growth and also leads mid-face hypoplasia. In this case report, the treatment of a patient with CLP by secondary alveolar bone grafting with anterior iliac bone graft and orthognathic surgery will be presented.

Case: A 19-year-old female patient with no medical history was referred to our clinic for the treatment of alveolar cleft and skeletal Class 3 malocclusion. According to the clinical and radiological examination, the presence of oronasal fistula in the area of the alveolar cleft and the accompanying bone defect were observed. Secondary alveolar bone grafting was performed to the cleft area using the anterior superior iliac crest. After an uneventful healing period of 6 months, bimaxillary surgery combined with Le Fort 1 osteotomy and bilateral sagittal split osteotomy (BSSO) was performed to correct skeletal Class 3 malocclusion. Inferior and anterior positioning of the maxilla and posterior positioning of the mandible were performed with Le Fort 1 osteotomy and BSSO, respectively. An allogenic bone block graft was also fixed with a titanium screw in the left side of the maxilla.

Conclusion: Orthognathic surgery is usually the final phase of treatment for patients with CLP in order to improve facial esthetics, stable and functional occlusion. More than 25% of patients with CLP develop a significant maxillary hypoplasia that requires surgical intervention.

Keywords: anterior iliac crest graft, cleft lip, cleft palate





PP-030

All Bad Splits are Bad? Treatment of a Case with Bad Split by Closed Reduction Following to Sagittal Split Osteotomy

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Purpose: An unfavourable pattern of the mandibular bilateral sagittal split osteotomy (BSSO) is generally referred to as a 'bad split'. The potential risk factors of the bad splits include thin mandibular ramus, high mandibular lingula, and the presence of third molars. In this case report, the treatment of a bad split, which occurs following to BSSO, with closed reduction will be presented.

Material-Methods: A 18-year-old female patient with no medical history was referred to our department due to the skeletal Class 3 malocclusion and bimaxillary orthognathic surgery was planned. The maxilla was positioned anteriorly with Le Fort 1 osteotomy procedure. Subsequently, BSSO was performed to position the mandible posteriorly. However, a bad split line, which runs on the buccal side from the inferior point of the vertical osteotomy, upwards to the posterior point of the medial osteotomy, was recognized in the surgical procedure. The segments were fixed with a titanium mini-plate and four titanium screws. Closed reduction was performed immediately after surgery with orthodontic elastics for 6 weeks. The patient recovered uneventfully in the follow-up period without relapse or skeletal and dental malocclusion.

Conclusion: Most of the bad splits in the mandible should be treated with additional fixation materials in the surgical procedure. However, in our case, the pattern of the split allows us to position the mandibular condyle passively in an appropriate position and to align the proximal and distal segments passively to one another without additional fixation.

Keywords: Sagittal Split Osteotomy, Bad Split, Orthognathic Surgery







PP-031 Alveolar Segmental Osteotomy and Interpositional Grafting in the Anterior Region of the Mandible: A Case Report

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Purpose: Horizontal and vertical bone loss is expected in the alveolar ridges following to tooth extraction. Hence, various augmentation techniques, such as guided bone regeneration, onlay bone block grafting, alveolar distraction osteogenesis and interpositional grafting may be performed for the rehabilitation of vertical bone defects. A patient, who treated with an alveolar segmental osteotomy and interpositional grafting to correct severe vertical bone atrophy in the anterior mandibular region, is presented in this case report.

Material-Methods: A 26-year-old female patient with no medical history was referred to our clinic with a chief complaint of edentulism in the mandibular anterior region. Severe vertical soft tissue defect and vertical bone defect were determined between the mandibular canine teeth in the clinical and radiological examination using cone-beam computed tomography, respectively. Following to a horizontal incision in the buccal vestibular area, segmental osteotomies were performed between the mandibular canine teeth under local anesthesia. The alveolar segment was positioned coronally after the vertical and horizontal osteotomies with piezo surgery while preserving the lingual periosteum. Coronally positioned segment was fixed with a titanium mini-plate and screws. Interpositional grafting was performed using particulate allogenic bone graft with a collagen membrane. The flap was released and closed primarily with a 4.0 propylene suture.

Conclusion: Alveolar segmental osteotomy and interpositional grafting is a safe and successful treatment option in patients with moderate to severe vertical bone defects. However, a percentage of up to 28% resorption was expected after the surgical procedure, therefore, overcorrection is required in this surgical procedure.

Keywords: Alveolar Segmental Osteotomy, Augmentation, Interpositional Grafting







PP-032 Fracture of the mandibular condyle and symphysis, a case report

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Objective: Fractures of the mandible in symphysis and parasymphysis areas are treated either closed (maxillomandibular fixation) or open reduction and internal fixation (plates and screws, lag screws). Open reduction, internal fixation is generally the treatment of choice for symphyseal and parasymphyseal fractures, although closed treatment is still an accepted alternative for certain patients with simple nondisplaced fractures.

Case: We present a case of a fracture of the mandible in the symphysis and condyle of a 35-year-old male. Diagnosis was made using a computerized tomography (CT) scan. pain, swelling, asymmetry in the mandibular anterior region, malocclusion, soft tissue injury and displaced and unstable fracture segments were observed on physical examination. Occlusion correction, open reduction and rigid fixation (mini plates and screws) through an intraoral incision was done under general anesthesia.

Conclusion: The patient was followed up weekly. After one month, a panoramic xray was taken, the fracture lines were aligned. The soft tissue was completely healed and the occlusion was right.

Keywords: condyle, mandibular fracture, symphysis







PP-033 Diffuse B-cell lymphoma diagnosis after biopsy: a case report

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Introduction: Diffuse large B-cell lymphoma is a malignancy that can be orally diagnosed in its early stages. In this case report, a patient will be presented and diagnosed with B-cell lymphoma after a biopsy taken from a non-healing lesion.

Case presentation: A 56-year-old male patient came to the clinic with a complaint of pain and numbness in the left mandible. A biopsy was performed from the relevant region of the mandible according to the results of a clinical and radiographic examination of the patient. After the pathological assessment of the biopsy results, the lesion was diagnosed as diffuse B-cell lymphoma, and the patient was referred to the hematology-oncology department.

Conclusion: Early diagnosis of diffuse large B-cell lymphoma is crucial for the prognosis, morbidity, and mortality in oral and maxillofacial surgery. It is critical to refer the patients to the oncology department along with the biopsy results for further evaluation and treatment.

Keywords: dentistry, oncology







PP-034 TMJ Ankylosis, Total Alloplastic Reconstruction Case Report

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TMJ ankylosis is a pathologic condition in which the jawbone is fused to the fossa with bone or fibrotic tissues. This condition interferes with chewing, speaking, oral hygiene, normal vital activities and can be life-threatening in the event of an emergency when it is necessary to obtain an airway.(1)

In our study, a 48-year-old woman with major epilepsy was admitted to our clinic for the treatment of unilateral TMJ ankylosis. The patient claimed that she had been operated 4 times before. CT scan and panoramic radiography revealed bony ankylosis involving the right TMJ and glenoid fossa. During surgery, the anterior and posterior borders of the ankylosed condyle were determined and the bone segment was removed with a handpiece. A submandibular incision was made two fingers below the mandibular margin for stability and fixation of the prosthetic part. The prosthetic part was fixed using titanium screws with the help of a surgical guide prepared on the head model created using CBCT in the preoperative period. The irregular edges of the segments were rounded with rondfreeze. A 4-5 cm incision was made in the skin and subcutaneous tissue from the abdomen, above the umbilicus to the groin area and then dissected to obtain a fat graft. The fat graft was cut and the fat graft and dermis were passively inserted between the segments. Deep tissues and skin were sutured. Intermaxillary fixatiton lasted for 3 days. In the postoperative period, transient paralysis was observed due to nerve damage.

Keywords: TMJ, TMD, TMJ ankylosis







PP-035 Healing Cap Pushed Into Sublingual Lodge: A Medical Malpratice Case

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Objective: In the field of oral and maxillofacial surgery, various unexpected complications and side effects often arise, and malpractice is a likely occurrence if careless treatment is administered. Malpractice must be strictly distinguished from complications, side effects (after-effects) and sequelae due to it refers to a medical negligence or error, including inadequate treatment and misdiagnosis by doctors.

Case: A 28-year-old systemically healthy male patient was admitted to our clinic with the complaint of missing teeth in the left lower jaw. Due to clinical and radiological examination; 4 years ago, at the another clinic two dental implants were placed in the left mandible in which the superstructure was not completed and a healing cap was observed that replaced the floor of the mouth. Due to there were no pathological formations around the healing cap and the patient had no clinical complaints in the relevant area, a follow-up record was created and the patient was informed about coming to regular check-ups.

Conclusion: All oral and maxillofacial surgeons should take great interest in studying and dealing actively with complications and medical problems. Proper diagnosis, treatment planning, surgical techniques, and detailed patient information are crucial for minimizing treatment related claims. Moreover, it has been highly recommended that referrals be made to relevant specialists for high-risk treatments.

Keywords: healing cap, medical malpractice, sublingual lodge



PP-036 Anterior segmental osteotomy in vertical bone deficiency

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Objective: treatment of vertical bone deficiency Case: Anterior Segmental Osteotomy Conclusion: The patient with vertical bone deficiency in the maxilla anterior region was reconstructed with a symphysis block graft after anterior segmental osteotomy was performed.

Keywords: Segmental Osteotomi, Vertikal Deficiency







PP-037 Compound Odontoma in Maxilla: A Case Report

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Objective: Odontomas constitute 22% of all odontogenic tumors of the jaws. W.H.O. They are divided into two groups according to their classification as complex and compound. They usually occur in the upper jaw, anterior incisor and canine tooth region. In both types, they can remain in small sizes for years without showing clinical signs, or they can reach a size that will cause expansion and asymmetry in the cortical bone. Because odontomas are asymptomatic, they can be detected incidentally on routine radiography. They are mostly associated with permanent teeth and rarely involve primary teeth. Although odontomas are benign tumors, they should be excised so that they do not prevent tooth eruption and do not form cysts.

Case: An 8-year-old female patient was admitted to our clinic with swelling in the posterior maxilla. In the oral examination, a firm and painless swelling was detected in the left posterior region of the maxilla. A prediagnosed lesion of compound odontoma was detected in the panoramic film taken and CBCT. All compound odontomas were removed one by one by reaching the lesion area under local anesthesia. Our patient's primary first and second molar teeth were also extracted. After the operation, periapical film was taken and the area was checked and followed up.

Conclusion: Odontoma can cause impacted teeth or delay in eruption. Early diagnosis of odontoma is important in reducing complications that may occur during treatment. In addition, with early treatment as a result of diagnosis, teeth can be erupted in normal times and malocclusions can be prevented.

Keywords: Compound Odontoma, Maxilla, Benign Neoplasm







PP-038 Ectopic Tooth in Sublingual Salivary Gland: A Rare Case Report and Surgical Management

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Objective: Ectopic teeth are structures found in non-oral cavity areas and are relatively uncommon. This case report presents a rare instance of a mandibular tooth in an ectopic position within the floor of the mouth, associated with the sublingual salivary gland.

Case: A 60-year-old female patient presented with discomfort and painless swelling in the right mandibular region, along with xerostomia. Extraoral examination revealed a hard, mobile, and slightly tender swelling at the floor of the mouth, with no signs of infection observed intraorally. Panoramic x-ray and computed tomography identified an ectopic tooth in the sublingual salivary gland region. After obtaining patient consent, the tooth was extracted via an intraoral incision, and the area was sutured without complications.

Conclusion: Ectopic teeth can lead to pain, discomfort, and infection (sialadenitis), making accurate diagnosis and surgical removal essential. Proper identification of the anatomical region through conventional or advanced radiographic examinations is crucial in determining the preferred surgical approach.

Keywords: Case report, Ectopic tooth, Sublingual salivary gland







PP-039 Management Of Complex Odontoma In Posterior Mandibula: A Case Report

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Objective: Odontomas are odontogenic tumors composed of dental tissues such as enamel, dentin, cementum and pulp. They are usually asymptomatic and are detected during routine radiographic examination. The majority of compound odontomas are seen in the maxilla with impacted canine, while complex odontomas are usually observed in the mandibular molar region. Although the formation of odontomas is associated with local trauma, infection and genetic factors, the etiology is not clear. In this case report, it is aimed to present the diagnosis and treatment of complex odontoma that prevents the eruption of the permanent molar tooth in the right molar region of the mandible.

Case: An 8-year-old girl was referred to our clinic for evaluation of a radiopaque mass in the right posterior mandible. Structures with dental opacity were observed in the CBCT images taken from the patient. After clinical and radiological examination, surgery was performed. The lesion was reached by removing the full thickness flap from the relevant area and the lesion was removed. The removed lesion was sent for histopathological examination. A diagnosis of complex odontoma was made. The patient's follow-up has been contuning for a year.

Conclusion: Odontoma is usually an asymptomatic, slowly progressive tumor. In the early diagnosis of odontoma cases, these lesions can be surgically removed to eruption the teeth.

Keywords: Complex odontoma, Impacted tooth, Tumor







PP-040 Amelobastic Fibro-Odontoma: A Case Report

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Objective: Ameloblastic fibro-odontoma (AFO) is a rare, slow-growing, benign, mixed odontogenic tumor usually associated with an erupted tooth. This lesion is commonly asymptomatic and discovered serendipitously during routine radiographic examination. It occurs more frequently in the mandibular molar region and at the first or second decade of the life. Radiographically, AFO demonstrates a well circumscribed mixed radiopaque and radiolucent lesion. AFO treatment is usually enucleation of the associated unerupted tooth with simultaneous removal. Recurrence is rare. In this case report, the clinical, radiographic and histopathological features an incidentally recognized ameloblastic fibro-odontoma case are discussed.

Case: Panoramic radiograph taken for routine control of a 14-year-old female patient showed a mixed, radiopaque and radiolucent lesion in the left mandibular posterior region, surrounded by a radiolucent ring with clear margins, associated with the unerupted third molar. The unerupted tooth associated with the lesion was treated by extraction during enucleation. As a result of histopathological examination, the diagnosis was made as ameloblastic fibro-odontoma.

Conclusion: Ameloblastic fibro-odontoma is a rare odontogenic tumor. This lesion accounts for approximately 3.1% of all odontogenic tumors and occurs in the first or second decade of life. In addition to ameloblastic fibro-odontoma, calcified odontogenic cyst, adenomatoid odontogenic tumor and compound odontoma should be considered in the differential diagnosis of radiopaque and radiolucent mixed lesions in children and adolescents. Since ameloblastic fibro-odontoma is well encapsulated and has a low tendency to local invasion, extraction of the associated unerupted tooth, enucleation and conservative surgery are recommended for its treatment.

Keywords: Ameloblastic fibro-odontoma, Mandible, Odontogenic tumor







PP-041 Radicular cyst in the Maxilla: A case Report

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Objective: Odontogenic cysts are divided into two classes: developmental and inflammatory. Radicular cyst is in the class of inflammatory cysts and is the most common cyst. Radicular cysts seen in the posterior maxilla may cause the infection to spread to the sinus as they are close to the maxillary sinus.

Case: A 44-year-old male patient without any systemic disease was admitted to our clinic with complaints of pain and swelling in the posterior region of the left maxilla. Radiographic evaluation revealed a radicular cyst-like cystic lesion associated with the roots of the left maxillary 1st molar, 1st and 2nd premolar teeth, and maxillary sinus. Root canal treatment was performed on the involved teeth. The patient was operated under local anesthesia and the mucoperiosteal flap was raised. After enucleation of the cystic lesion, apical resection of the relevant teeth was performed. The flap was closed primarily with a 4/0 resorbable suture. We confirmed that the lesion is a radicular cyst by histopathological examination. In the postoperative period, the patient was given analgesic and antibiotic drugs. The follow-up of the patient, who did not develop any complications in the postoperative period, continues.

Conclusion: Radicular cysts are diagnosed during routine radiographic examinations or by acute symptoms. It should be kept in mind in the differential diagnosis of cysts involving the maxillary sinus. The recommended treatment option for radicular cysts is surgical enucleation of the cyst.

Keywords: Apical resection, Enucleation, Radicular Cyst







PP-042 Peripheral giant cell granuloma in the maxilla: A case Report

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Objective: Peripheral giant cell granuloma (PGCG) is a lesion that occurs on the gingiva and alveolar crest due to local irritant factors. It can cause mobility in the teeth it is associated with. Its clinical appearance is similar to liver tissue. The treatment of PGCG is local excision and elimination of local etiological factors.

Case: A 66-year-old female patient was admitted to our clinic with the complaint of swelling in the maxillary anterior region. In the intraoral examination, a blue-purple soft tissue mass was detected in the anterior region of the maxilla. The mass was thought to be PGCG. The biopsy was performed under local anesthesia. Then the lesion was excised completely. The wound site was closed primarily. A diagnosis of PGCG was made in the histopathological evaluation. No complications were encountered. Necessary medications were prescribed to the patient. The follow-up of the patient continues.

Conclusion: These lesions, which can be seen in the mouth, can reach significant sizes when neglected. Relapse can be prevented by eliminating the causative factor. It should be considered that patients should be kept under control with long-term follow-ups.

Keywords: Giant Cell Epulis, Peripheral Giant Cell Granuloma, Reactive Hyperplasia







PP-043

Removal Of A Closing Screw Of Dental Implant Displaced In The Infratemporal Fossa Using An Intraoral Approach

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Objective: There is no consensus in the literature or established management approach for displacement of the foreign objects such as closing screws into the infratemporal fossa. Surgical and conservative approach eshave been reported; the surgeon is expected to select the most appropriate strategy for each case. Recommended management steps include immediate surgical removal if possible, initial watchful waiting and delayed removal, or observation alone. Complications associated with the presence of the closing screw in the infratemporal fossa include infection, pain, limitation of mandibular movement, and psychological discomfort.

Case: A 47-year-old female patient was referred to our clinic with complaints of pain in the right maxillary posterior region. Clinical and radiographic examination was performed after anamnesis. In the anamnesis, it was learned that the patient had dental implant treatment in an external center 24 days ago. In the CBCT image, it was seen that the closing screws of the dental implant placed on the right maxillary second molar tooth were displaced into the infratemporal fossa. Due to the patient's pain, it was decided to surgically remove the closing screws. The displaced closing screws were surgically removed with an intraoral approach under local anesthesia.

Conclusion: The literature shows that surgical management options for foreign material displaced into the infratemporal fossa are varied, including local or general anesthesia, intraoral access with Caldwell-Luc technique or resection of the coronoid process, combined or exclusively extraoral access or the Gillies approach. Among these techniques, intraoral approach gives positive results in terms of patient's treatment and comfort.

Keywords: closing screw, infratemporal fossa, intraoral approach







PP-044 Large Complex Odontoma of the Mandible: Case Report

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Objective: Odontomas are benign tumors that are usually detected during routine radiographic controls or because of the asymptomatic swelling they cause. The World Health Organization has divided it into three types: complex, compound and ameloblastic fibro odontoma. Irregular, smaller than normal and amorphous tooth formation as a result of multiple budding during odontogenesis creates compound odontoma and the hard masses formed as a result of calcification of these irregular structures form a complex odontoma. Its etiology has not been clearly elucidated. Treatment of odontomas is total surgical excision. Excision is recommended especially to prevent cyst formation and transformation into odonto-ameloblastoma.

Case: A 28-year-old systemically healthy male patient was referred to our clinic from an external center. In the clinical and radiological examination, a well-circumscribed irregular radiopaque mass was observed in the distal part of the third molar tooth. After the preoperative evaluations, the patient was informed about the radiopaque mass infiltrating the mandibular canal and the numbness that may occur after the surgical procedure. The patient refused total removal of the mass. Therefore, incisional biopsy was performed on the radiopaque mass under local anesthesia. Afterwards, the impacted third molar tooth was extracted. The pathology result was reported as complex odontoma. The patient's routine controls continue.

Conclusion: Recurrence of odontomas with surgical excision is low. Therefore, their total excision after diagnosis will prevent possible complications and recurrences. Diagnosis of odontomas at an early age is important for easier management of the process and minimizing the need for intervention.

Keywords: Compound odontoma, mandibula, tooth-like







PP-045 Huge cementoblastoma in mandible; A case report

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Cementoblastoma is a rare benign odontogenic neoplasm of ectomesenchymal origin, accounting for fewer than 1% of all odontogenic tumors. Although it can be seen at almost any age, it occurs in individuals under the age of 25 and does not differentiate between sexes. The mandible is more involved than maxilla and it is usually associated with roots of mandibular molar and premolar. It is radiographically distinctive and diagnostic. The round radiopaque mass and its circles are usually surrounded by a uniformly wide radiolucent rim. Although considered benign cementoblastoma may be a locally aggressive neoplasm in some cases, with significant bony expansion, pain and swelling. The tumor characteristics are well known, the standard practice to treat this lesion is surgical excision and extraction of the affected tooth. A 17 years old young woman from pain, swelling, numbness in the lower lip and facial asymmetry is referred to our department. As a result of clinical and radiological examination, a radiologically mixed lesion with radial extensions,4-5 cm in size, causing buccal and lingual expansion and perforation was found in the left mandibular corpus. In this report, diagnose and surgical treatments of aggressive cementoblastoma localized in the mandible is going to be presented.

Keywords: Cementoblastoma, Iliac crest, Reconstruction plate







PP-046 Interesting clinical use of the implant-supported fixed prosthesis despite failure: a case report

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Objective: Dental implants are placed in the edentulous areas of both jaws by surgical techniques. Although implants have many advantages, sometimes undesirable conditions may occur in hard and soft tissues. In this case report, we aimed to present the implant-supported fixed prosthesis, which the patient used persistently during the pandemic despite the failure.

Case: A 52-year-old male patient was admitted to our clinic complaining of pain in the implantsupported fixed prosthesis made in his upper jaw. It was learned that the implants were made in a private health institution before the Covid-19 pandemic. The patient, who could not reach the closed practice after the pandemic, reported that he applied to our clinic when his complaints increased. It was observed that an implant-supported fixed prosthetic rehabilitation was performed on four implants in the upper jaw. Mobility was detected in the prosthesis. The osseointegration of 3 implants was impaired due to periimplantitis and remained cemented to the prosthesis. Although there was bone loss around an implant, it was found in the bone. The patient had used his prosthesis this way for about six months. Under local anesthesia, the last implant in the mouth was explanted, and the soft tissues in other regions were curetted. The recovery process continues in the patient who is scheduled for advanced surgery.

Conclusion: For a successful implant treatment, the patient and the physician are responsible. Measures should be taken against possible negativities, and an ideal treatment protocol should be established in the face of problems.

Keywords: dental implant, periimplantitis, Covid-19







PP-047 Treatment of oroantral fistula after tooth extraction with buccal fat pad: a case report

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Objective: Oroantral fistula(OAF) is pathological pathway that connects the oral cavity and the maxillary sinus. Due to the close relationship of the maxillary sinus with the maxillary molar and premolar teeth, OAF may occur due to pathological conditions in these teeth or post-surgical sinus membrane perforation. An opening larger than 5 mm in diameter cannot close on its own and must be closed with an appropriate surgical procedure. In this case, treatment of OAF developing 1 month after tooth extraction with buccal fat pad(BFP) will be explained.

Case: A 37-year-old male patient without any systemic disease was admitted to our clinic with complaints of bad breath and liquid drinks coming into the nose after tooth extraction in the right maxillary region 1 month ago. OAF was diagnosed as a result of clinical and radiological examination.For the treatment of OAF, the patient was processed under local anesthesia and the mouth of the fistula was cut with a scalpel. Mucoperiosteal flap was then reflected.BFP was exposed by blunt dissection from relevant region. This adipose tissue was carefully advanced to close the opening and sutured to the palatal mucosa with 4.0 vicryl sutures. Then the flap was brought back to the same position and sutured with 3.0 silk suture. Necessary medications were prescribed to the patient. No complications were encountered. The follow-up of patient continues.

Conclusion: Untreated OAF can cause speech and feeding problems, facial pain, and chronic sinusitis. Closing these openings with BFP is a common technique. BFP is rapid in epithelialization because it has good blood supply.

Keywords: Buccal fat pad, oroantral fistula, oroantral opening







PP-048 Dentigerous cyst in a geriatric patient: a case report

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Objective: Dentigerous cysts are cysts seen around unerupted or semi-impacted teeth. These lesions are usually asymptomatic and detected on routine radiographs. They are the most common cysts after radicular cysts. In this case, the surgical enucleation of the dentigerous cyst detected in our geriatric patient will be explained.

Case: A cystic lesion associated with an impacted tooth was detected in the right maxilla posterior of a 64-year-old male patient who applied to our clinic for routine controls. As a result of tomography taken from the patient, it was seen that the cystic lesion measuring 25X25 mm had spread to both the infratemporal region and the maxillary sinus. It was processed under local anesthesia and the flap was lifted with a crestal incision and the cystic lesion was reached. The cystic lesion was enucleated with the extraction of the impacted tooth. The flap was closed primarily with 3.0 silk sutures. No complications were encountered. The histopathology of the lesion was confirmed as a dentigerous cyst. The follow-up of the patient continues.

Conclusion: Dentigerous cysts commonly grow without symptoms. They can reach large sizes. Therefore, attention should be paid to radiographic images of impacted or semi-impacted teeth during clinical examination.

Keywords: Dentigerous cyst, Enucleation, Impacted tooth







PP-049 PRP Application After Sequestretomy in Stage 2-3 BRONJ Case

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Objective: BRONJ is typically a chronic soft tissue wound exposing the underlying jawbone, that persists over 8 weeks in patients taking bisphosphonates.Contemporary research focuses on pathogenesis of the disease, various conservative and surgical treatment modalities and their clinical implications. In this case we aimed to evaluate our management of BRONJ cases stage2-3.

Case: A 24-year-old male patient applied to our clinic with the complaint of pain in the mandible. After anamnesis, it was learned that the patient had stage 4 lung cancer. It was learned that intravenous bisphosphonate medication (he had been using for 7 months). The patient's tooth was extracted from the posterior left mandible 1 month ago by an external center clinic. During the examination, exposed bone and pus flow was observed in that area. Combined antibiotic amoxicillin-metranidazole was prescribed to suppress the infection. When the patient came to the examination 3 months later, a decrease in pus flow and an increase in sequestration were observed and sequestretomy was performed. PRP was applied to the area after sequestrectomy. When the patient came to the examination after 2 weeks, it was seen that the complaint of pain decreased and the wound area healed.

Conclusion: In general, a thorough dental examination is recommended, and if necessary dental treatment is completed before starting bisphosphonates. However, patients were usually late for referral to oral surgery as most of them had stage II or stage III BRONJ at presentation. At these stages, after the formation of sequestra, the application of sequestretomy gave positive results. It has also been observed that applying PRP to the surgical area accelerates the healing of the wound.

Keywords: BRONJ, PRP, Sequestretomy







PP-050

Treatment of Mandibular Hypomobility Due to Bilateral Coronoid Process Hyperplasia with Coronoidectomy: A Case Report

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Objective: Coronoid process hyperplasia of the mandible is defined as bone elongation with histologically normal bone structure. In this study, it was aimed to present the treatment of a rare case of bilateral coronoid process hyperplasia with coronoidectomy.

Case: A 21-year-old male patient with limited mouth opening for a long time was referred to Kocaeli University Faculty of Dentistry, Oral and Maxillofacial Surgery Clinic since dental treatments could not be performed due to insufficient maximum mouth opening in a dental clinic he previously applied to. After the clinical and radiological examination, the patient was diagnosed with bilateral coronoid process hyperplasia. The surgical procedure was performed under general anesthesia. Incisions and subperiosteal dissections were performed intraorally. An intermaxillary fixation screw and stainless steel wire were used to prevent retraction of the coronoid processes into the infratemporal fossa after osteotomy. Piezosurgery equipment was used in osteotomies on both sides. The maximum mouth opening, which was 13 mm before the procedure, was measured as 38 mm after the procedure. Physiotherapy was started the next day after the coronoidectomy. The patient recovered uneventfully.

Conclusion: It was observed that bilateral coronoidectomy and post-surgical physiotherapy gave successful results in mandibular movement limitation due to bilateral coronoid process hyperplasia.

Keywords: Coronoidectomy, Coronoid process hyperplasia, Hypomobility







PP-051

Biomechanical Investigation of The Effects of Occlusal Stabilization Splint Therapy Used in Reduced Anterior Disc Displacement on The Temporomandibular Joint Structures

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Objective: Temporomandibular joint diseases refer to diseases that are common in the community, etiology of which is unknown, and includes joint-related myogenic or arthrogenic disorders. The term temporomandibular disorder encompasses all diseases of the joint, and joint and muscle symptoms are observed in most patients. Reducing anterior disc displacement (RADD) is one of joint diseases encountered in 15%-25% of patients among temporoamandibular disorders. Treatment options for temporomandibular disorders include conservative (occlusal splint, drug therapy) and surgical approaches.

Materials-Methods: A female patient(26) who underwent intraoral and extraoral examinations, did not have any dental problems, systemic diseases, any concomitant joint diseases, and had not received joint treatment before, was included in our study. As a result of Magnetic Resonance Imaging and panoramic film, diagnosis of RADD was confirmed according to criteria of RDC/ TMD classification. It was decided to start occlusal splint treatment. In our study, the stresses on the TMJ structures with occlusal splint of 3 mm vertical thickness on class 1 model with anterior disc displacement were investigated. Finite element analyse(FEA) program were used. Two different models were created.

Model 1: The disc is in the anatomical position and the splint is inserted in mouth. Model 2: The disc in anterior position, the splint inserted in mouth.

Conclusion: In conclusion, occlusal splint therapy offers an effective and safe approach to preventing TMJ from stresses according to FEA.

Keywords: Finite element analyse, Reduced anterior disc displacement, Temporamandibular joint







PP-052 Orofacial findings may provide clinical clues in the diagnosis of Juvenile Scleroderma

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Objective: Scleroderma is a connective tissue disease characterized by thickening and hardening of the skin. Juvenile scleroderma is the form of this disease seen under 16 years of age. Juvenile scleroderma is the third most common rheumatic disease in pediatric rheumatology after juvenile idiopathic arthritis and systemic lupus erythematosus. The clinical appearance and course of the disease are different from the adult form.

Case: The patient, who had no diagnosis of rheumatological disease in the past, applied to Oral and Maxillofacial Surgery clinic with the complaint of limitation in mouth opening. In the examination of the patient, marked stiffness of the facial skin, masked facial appearance, and perioral contracture are observed. In the intraoral examination of the patient, the maximum interincisal distance was measured as 21 mm. Despite the limitation of the mouth opening, no intracapsular or extracapsular symptoms were observed in the TMJ examination. Cortical borders in the condyle are regular and there is no resorption. Panoramic radiography shows enlargement of the periodontal space in the mandibular posterior molars. The patient was consulted to Dermatology and Pediatric Rheumatology Departments with a preliminary diagnosis of secleroderma. Methotrexate and tocilizumab combination treatments were started with the diagnosis of juvenile scleroderma in Pediatric Rheumatology Department.

Conclusion: Oral and Maxillofacial surgeons should also consider scleroderma as a differential diagnosis by evaluating other clinical findings in patients with limited mouth opening.

Keywords: Juvenile Scleroderma, limited mouth opening







PP-053 Sialolithiasis Of Submandibular Gland Duct: A Case Report

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Sialolithiasis is the most common disease of the salivary. Sialolithiasis the formation of calcific concretions within the parenchyma or ductal system of the major or minor salivary glands, but it most commonly affects the submandibular salivary gland. Sialolithiasis usually occurs in adults aged 30 to 60 years. Sialolithiasis is more common in males than females. There are various presenting symptoms, with the most common being cyclical postprandial swelling of the affected gland and decreased salivary flow and causes pathognomonic pain during meals. Treatment of sialolithiasis depends on the size and location of the calculi.

An 87-year-old male patient presented with the complaint of intraoral swelling in the right submandibular region and pain during meals. As a result of the radiological and clinical examination, salivary gland stones were detected in the submandibular duct. There was discharge associated with the swelling. We clinically diagnosed the patient as having right submandibular salivary gland. After the necessary examinations were made, a plan was made to surgically remove the salivary gland stone.

At the end of our surgical intervention, we removed a salivary gland stone of approximately 15 mm in size. We placed a suction drain and closed the wound in layers. The patient experienced no postoperative complications on follow-up evaluations.

Keywords: salivary gland diseases, sialolithiasis, submandibular gland sialolithiasis







PP-054 Alveolar Ridge Augmentation Using Hybrid Xenograft Bone Block: Case Presentation

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Objective: The deficiency of alveolar bone has been a challenge both in surgical and prosthetic rehabilitation. For severe atrophic cases, different types of bone graft materials have been proposed to reconstructed the deficient areas and staged dental implant placement. Bone graft materials alter function and appearance with a support by height and volume. In addition, the post-operative findings have essential importance regarding to the selection of these materials. This case report was presented to the clinical outcomes of hybrid xenograft bone blocks in alveolar ridge augmentation.

Case: Four patients were treated at the Department of Oral and Maxillofacial Surgery, School of Dentistry, Ege University. Bovine-derived xenograft bone blocks combining the bioactive resorbable polymers and collagen fragments, were used to augment alveolar ridge. The grafts were covered with particulate form of same graft material and a collagane membrane. Vertical ridge augmentation of the partially edentulous posterior mandible was performed in 2 cases. Maxillary bone block grafting was carried out as horizontally. Peri-operative (graft fracture or incorporation, bleeding) and post-operative (wound dehiscene, infection or graft loss) complications were collected.

Conclusion: Early wound dehiscence without infection was observed in posterior mandible and no peri-operative complications were occured in both augmented sites. Soft tissue thickness and muscular attachments in posterior mandibule can be effective in these results. Therefore, the contextual factors for the success of treatment should be defined to provide widespread use of hybrid xenograft.

Keywords: block graft, bone augmentation






PP-055 3D-printed Guide Template for the Reduction of Mandibular Symphysis Fracture Model

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Objective: The purpose of this study is to investigate the effectiveness of the guide template by manufacturing it by 3D-printing a mandibular symphysis fracture model and performing simulated reduction surgery

Methods: The mandibular model STL file was created by superimposing the STL file obtained for the maxillary and mandibular dentition and the CT file, set as the original model. The two mandibular fracture models were temporarily fixed by the normal occlusal relationship, and simulation was performed, and this was set as a control group. Using the control group, a device similar to a wafer used for orthognathic surgery was manufactured, and the mandibular fracture model was fixed using the device and wire to set the experimental group. The 3D coordinate system error was measured, and statistically compared using the paired t test and Kruskal-Wallis test

Results: When comparing the x, y, z coordinates before and after the simulation of the six points on the right, there was a statistically significant difference in lower1, upper1, and lower2. The three-dimensional error value (Δ 3D) of 6 points (120 points in total) between the control group and the experimental group was 0.96 ± 0.48 mm (range: 0.2 - 2.95 mm). The Δ X, Δ Y, and Δ Z values of the six points were not statistically significant.

Conclusion: Since the error before and after the simulation surgery is not statistically significant, it is thought that the error after surgery will not be large even when the 3D-printing guide template is applied to clinical practice

Keywords: Trauma, 3D-printed Guide Template







PP-056

The complication of overfilling root canal sealer during endodontic treatment: a case report

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Objective: Root canal preparation and filling play an essential role in the success of root canal treatment. During routine endodontic treatment, complications such as instrument breaks, perforations, and overfilling of sealers can be observed. This case report presents complications caused by overfilling root canal sealer during endodontic treatment in the maxilla premolar region.

Case: A 30-year-old female patient was admitted to our clinic with complaints of pain, swelling, and burning in the posterior region of the left maxilla. In the anamnesis, it was learned that root canal treatment was started for the left second premolar tooth one month ago. After the procedure, her complaints started in the relevant region. In addition, the patient reported that he could not move his left upper lip as easily as before after the procedure. It was learned that she applied to otolaryngology and neurology clinics in one month, and various drug treatments were started. A radiographic examination revealed bone irregularity over the buccal root of the left upper second premolar tooth. The area was reached under local anesthesia, it was observed that the root canal sealer overfilled. The root canal sealer was removed, and the flap was closed primarily. During the follow-up period, it was observed that the patient's complaints regressed.

Conclusion: Overfilling materials after endodontic treatment may cause infection, pain, swelling, or cystic lesions. In such a case, detecting and quickly removing foreign bodies is important.

Keywords: complication, endodontic treatment, foreign body







PP-057 Tissue Necrosis due to Accidental Chloroform Injection: A Case Report

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Objective: This case reports provides information about the clinical table and therapeutic management observed in a patient who was accidentally administer choloroform.

Case: A 54-year-old male patient with no systemic disease was referred to our clinic because of severe pain during anesthesia from another clinic. In the anamnesis, it was noticed that the patient was injected with chloroform instead of local anesthesia. It was observed that there was severe pain and ischemia during the injection in the palatal region. As a result of the therapeutic interventions applied, a healing table was observed.

Conclusion: Such disastrous events can be prevented by appropriate labeling and separate dispensing methods for each solution. There is a need for disseminating information on toxicity and biocompatibility of materials/solutions used in dentistry. Dentists should be aware of the immediate and long-term therapeutic management to be applied to patients in the event of such an accidental injection.

Keywords: Accident, chloroform, necrosis







PP-058 Posterior Tooth Autotransplantation: A Case Report

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Objective: Tooth transplantation is indicated in growing patients with teeth with poor longterm survival prognosis, when a suitable donor tooth can be used without adverse effects on the arch. It enables reconstruction using the most biocompatible material, the patient's own tooth.

Case: A 29-year-old female patient was referred to our clinic for extraction of unrestorable teeth 36 and 38 (Figure 1). There was no history of systemic disease, medication or trauma. Considering the young age of the patient and the possibility of success, autotransplantation procedure was planned. Teeth number 36 and 38 were extracted. Cavity of tooth number 36 was prepared for autotransplantation (Figure 2). Tooth number 38 was placed in the prepared extraction socket without touching the root. The tooth placed in the socket was immobilized and split to the adjacent teeth for two weeks (Figure 3). No symptoms were encountered for two months.

Conclusion: Tooth autotransplantation preserves alveolar bone growth potential. It allows the formation of a functional periodontal ligament and tooth eruption. It promotes bone filling in missing areas, and the gingival contour is generally superior to that obtained with prosthetic alternatives. For these reasons, it can be a method that can be used especially in young patients with high aesthetic and functional results alternative to other treatment options.

Keywords: Autotransplantation, Oral Surgery, Tooth Extraction







PP-059 Dentigerous Cyst in Mandible

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Objective: Dentigerous cysts are one of the most common developmental types of odontogenic cysts occurring in the oral cavity and often manifest as incidental findings on dental radiographs and/or as asymptomatic swellings. Dentigerous cysts encompass the crown of permanent and unerupted impacted teeth. In this case, we present the treatment of a dentigerous cyst located in the mandible.

Case: A 52-year-old male patient without any systemic disease was applied to our clinic for a routine dental examination. Intraoral examination revealed a painless swelling on palpation in the mandibular impacted canine region. On radiographic examination, there was a large radiolucent lesion associated with an impacted canine in the right mandibular region. As a result of the vitality test, teeth 42,41,31,32,33,34 were found to be vital. The impacted tooth 43 associated with the cyst and the malpositioned tooth 44 were extracted. The cyst was enucleated. An excisional biopsy was performed and sent for histopathological examination. The histological evaluation resulted in a dentigerous cyst. The patient was seen one week later to have his stitches removed and to check his health.

Conclusion: Dentigerous cysts may be treated by enucleation or marsupialization. The treatment decision is made by considering different criteria, including the size of the cyst, the location of the cyst, the extraction of an unerupted tooth, and the possibility of a follow-up. In this case, enucleation treatment was deemed appropriate considering the location and size of the lesion.

Keywords: Dentigerous cyst, Mandible, Odontogenic cyst







PP-060 Treatment of Mandibular Symphysis and Subcondylar Fracture with Open Reduction

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Objective: Mandibular fractures constitute 12% to 56% of all facial fractures. According to anatomical regions, fractures are seen in the angulus, corpus, subcondylar region, parasymphysis-symphysis and ramus coronoid and alveolar region. Isolated fractures may occur as well as combined fractures. Treatment of mandibular fractures is divided into two main groups: closed reduction and open reduction. In this case report, we will talk about the treatment approach we applied to a patient who came to our clinic with subcondylar and parasymphysis fractures.

Case: A 54 year old male patient was admitted to Kent University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery due to trauma caused by a traffic accident. Intraoral and extraoral examination revealed pain, swelling, malocclusion, facial asymmetry, and restricted mouth opening (max. mouth opening 16 mm). Panoramic X-rays and tomography images showed a fracture line extending from the canine tooth level to the basis in the mandibular right subchondylar region and left parasymphysis region. The patient was treated with intermaxillary fixation (IMF) followed by open reduction and fixation of the fracture line in the parasymphysis region intraorally and in the condyle region extraorally with mini plates and screws. IMF was removed 1 week postoperatively. The patient was followed up routinely.

Conclusion: The treatment of mandibular condyle fractures has been a controversial topic because there are various approaches in the literature. Open reduction offers advantages such as rapid restoration of occlusal function, optimal repositioning and reduced loss of working time.

Keywords: Mandibular fracture, open reduction, intermaxillar fixation







PP-061 Adenoid Cystic Carcinoma: A Case Report

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Objective: The purpose of this case report is to draw attention to adenoid cystic carcinoma, which is the most common type of all malignant minor glands.

Case: A 42-year-old male patient was admitted to our clinic with the complaint of bleeding and swelling in the right upper palatal region gingiva. It was learned that the patient had a tooth extracted from the same area 1.5 years ago. In the clinical examination, a post op painless hyperemic alveolar lesion was detected. In the radiological examination, on the panoramic radiograph from the patient, a radiolucent lesion with clear margins was detected in the maxillary right molar region, causing resorption of the alveolar bone. Excisional biopsy taken from the region under local anesthesia was sent to the pathology laboratory.

Conclusion: Adenoid cystic carcinoma is a malignant tumor with a characterized by indolent, locally invasive growth with high propensity for local recurrence and distant metastasis. Since it has various clinical features and histological types, it is often difficult to diagnose and treat them. Characteristic features include aggressive, slow growth, with insidious destruction of surrounding tissues and perineural invasion. Pain is usually a common and important associated symptom, occasionally occurring before clinical evidence of the disease. However, when there is no pain, like in our case, it may be ignored by the patient and may not be noticed for many years. Considering the high metastatic rate and recurrence, diagnosis is very important.

Keywords: adenoid cystic carcinoma, histopathology, minor salivary gland tumors





PP-062

Osteochondroma of the Coronoid Process In the Medial Of the Zygomatic Arch (Jacob's Disease): Rare Case Report

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Objective: Osteochondroma is a benign tumor that arises from the cortex of bone, is covered with cartilage, and is typically found in endochondral bones. Although it is commonly seen in the axial skeleton, it is rare in the craniofacial region. It is most commonly found in the condyle or coronoid process of the mandible. Oscar Jacob first described osteochondroma of the coronoid process in 1899 and gave it the name "Jacob's Disease." In this case report, a rare case of 'Jacob's Disease' reported in the literature is presented.

Case: A 33-year-old woman with limited mouth opening (5mm) and pain and clicking in the right joint area presented to the Istanbul Kent University Oral and Maxillofacial Surgery Clinic. Computerized tomography (CT) examinations revealed a mushroom-shaped coronoid process enlargement along with a pseudojoint formation in the medial aspect of the zygomatic arch. The patient underwent coronoidectomy via intraoral approach under general anesthesia. The excised tissue was sent for histopathological examination, and the diagnosis of osteochondroma of the coronoid process was made.

Conclusion: Osteochondroma is one of the most common benign tumors of the axial skeleton, but it is uncommon in the craniofacial region. The main treatment for symptomatic osteochondromas is surgical excision, which can be performed intraorally. This case report was prepared by reviewing current literature on the etiology, pathogenesis, clinical features, diagnosis, and treatment of the disease.

Keywords: Jacob's Disease, Mushroom-shaped Coronoid Process Enlargement, Ostochondroma







PP-063 Diagnosis of Stage IV Lung Cancer by Oral Cavity Metastasis

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Objective: Lesions in the oral tissues are important in the diagnosis of many systemic diseases. Identification of erosive-ulcer lesions in soft tissue has an important place in the diagnosis of malign lesions of the patient. Oral cavity metastases in lung cancers are very rare in the literature. In this case report, clinical, radiological and pathological findings of a male patient diagnosed with lung cancer with metastatic involvement in the mandible are presented.

Case: We present a 62-year-old man who was applied to our clinic due to a soft tissue mass after extraction. An invasive mass consisting of irregular and ulcerated areas on the alveolar crest formed after extraction was observed in the anterior of the mandible, and it was decided to excision. The lesion was performed by taking excisional biopsy under local anesthesia. As a result of the histopathological examination, a diagnosis of carcinoma predominant from clear cells was made. The patient was referred to the Oncology department for the determination of the primary focus and the examination of metastatic spread, and the diagnosis of phase IV lung cancer was made as a result of histological and radiographic evaluations.

Conclusion: Oral lesions have an important place in the diagnosis of cancers. Identifying erosive-ulcered lesions in soft tissue while performing oral examinations on patients is critical for early detection of potentially malignant lesions.

Keywords: Oral cavity, Metastasis, Lung cancer







PP-064

Extraction of the Impacted Canine in the Base of the Mandible and Reconstruction of the Surgical Area with a Mini-plate: A Case Report

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Objective: Dentigerous cysts are odontogenic cysts, which are usually seen in the 2nd-3rd decades, mostly in males. It is usually seen around the crowns of unerupted or partially erupted third molars. These cysts do not cause symptoms unless they are infected and do not reach sizes to create asymmetry. In this case report, enucleation and subsequent with miniplate reconstruction of a dentigerous cyst that has reached the size of a jaw fracture in a male patient is presented.

Case: A 34-year-old male patient was referred to our clinic because of a cyst associated with an impacted canine tooth in the anterior mandible. In the CBCT image, it was observed that the left permanent canine was impacted in a horizontal position at the basis of the mandible and a radiolucent lesion was formed around it. The patient was operated under local anesthesia. The impacted canine tooth was extracted, and the surrounding cystic lesion was curetted. The area was supported with a miniplate, as the resulting bone defect may pose a risk of fracture in the mandible. The pathology result was compatible with dentigerous cyst.

Conclusion: Dentigerous cysts can sometimes reach very large sizes without symptoms. This may result in jaw fractures, especially in elderly patients. Early diagnosis and treatment of the cyst is important to rule out this risk.

Keywords: impacted canine, miniplate







PP-065

Multiple Radicular Cysts and Impacted Supernumerary Tooth in a Nonsyndromic Patient: A Rare Case Report

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Objective: Radicular cysts are among the most common cysts in the jaws and always appear together with devital teeth. These cysts can reach large sizes and cause resorption of the bone in the area. When infected, symptoms such as pain, swelling, pus flow may occur. There are many surgical and non-surgical treatments of radicular cysts. However, surgical treatment alone is not sufficient in cysts that reach large sizes. In some patients, in addition to radicular cysts, different pathologies may be present. In this case report, large radicular cysts in the maxilla and mandible and the surgical treatment of the supernumerary tooth embedded in the left maxillary sinus are described.

Case: A 30-year-old female patient was admitted to our hospital due to an extraoral fistula in the anterior mandible. In the radiological and intraoral examination of the patient, radiolucent lesions were observed in the root canal treated teeth in the maxilla and mandible. CBCT was requested from the patient and as a result of the examination, in addition to radicular cysts, impacted supernumerary teeth were seen in the left maxillary sinus. The patient was operated under general anesthesia. Radicular cysts were enucleated. The supernumerary tooth in the left maxillary sinus was extracted.

Conclusion: Radicular cysts are the most common inflammatory cysts in the jaws. These cysts can rarely be seen together with other pathologies.

Keywords: radicular cyst, supernumerary tooth







PP-066 Treatment Of the Patient with Unilateral Coronoid Hyperplasia by Coronoidotomy: A Case Report

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Objective: Coronoid hyperplasia is a rare pathology. This pathology was first described by Jacob in 1899. The elongated coronoid process hits the zygomatic arch and mouth opening is restricted. This condition has many etiologies. Coronoid hyperplasia can be unilateral or bilateral. Facial asymmetry can be seen, especially in the unilateral type. Both types of coronoid hyperplasia are more common in the male sex. There are surgical techniques such as coronoidotomy and coronoidectomy in its treatment. In this case report, the treatment of a patient with unilateral coronoid hyperplasia with coronoidotomy is described.

Case: A 17-year-old male patient was admitted to our surgical service because of his decreased mouth opening in the last 1 year. As a result of the clinical examination, the maximum mouth opening of the patient was noted as 24 mm. The mouth opening did not increase with the hand manipulation of the physician. As a result of the CBCT imaging of the patient, it was observed that the left coronoid was hyperplasic, but the right coronoid was within the anatomical limits. Due to the excessive length of the left coronoid, coronoidotomy was planned. The patient was operated under general anesthesia. Postoperatively, the patient's mouth opening reached normal anatomical limits. The patient is followed up with aggressive physical therapy.

Conclusion: Coronoid hyperplasia is a rare pathological condition that is frequently seen in male gender. There are many etiologies. However, in unilateral cases, especially temporal muscle hyperactivity comes to the fore.

Keywords: coronoidotomy, hyperplasia, maximum mouth opening







PP-067 Multiple Odontomas With Impacted Mandibular Canine and Premolar: A Case Report

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Objective: Odontomas are benign formations containing structures that form the tooth and are classified as hamartomas. There are two histological subtypes which are complex and compound odontoma. The complex odontoma is a pathological lesion in which toothforming structures such as enamel, dentin and cementum come together without a specific organization. Compound odontomas are organized in a similar way to teeth. Odontoma is usually seen in children and adolescents. The incidence in men and women is the same. They usually occur in the maxilla anterior region. In this case report, the treatment of compound odontoma with permanent teeth impacted in the premolar canine region of the mandible in a 43-year-old female patient is described.

Case: A 43-year-old female patient applied to our hospital for the rehabilitation of missing teeth. On radiological examination, it was seen that the canine and premolar teeth in the left side of the mandible were impacted. The radiopaque formation around the two impacted tooth crown was detected. Excisional biopsy was performed. Multiple tooth-like structures which was around the impacted teeth were removed as well. The extraction of the impacted canine and premolar tooth was performed. In the histopathological examination, the lesion was diagnosed as compound odontoma.

Conclusion: Odontomas are known as benign lesions which may cause some tooth impacted in the bone. Therefore, the early diagnosis is significant for clinicians.

Keywords: impacted teeth, odontoma







PP-068 Surgical Approach for Odontogenic Keratocyst with Recurrence in 3-Year Follow-up: A Case Report

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Objective: Odontogenic keratocyst was described by Philipsen in 1956. Keratocysts are mostly seen as unilocular or multilocular lesions in the posterior mandible. There are 2 histological subtypes, moderately orthokeratinized and parakeratinized. Among these, the recurrence rate of the parakeratinized form is higher. Many methods have been tried to reduce the likelihood of recurrence. The chemical etching method after enucleation, which is among them, has given successful results. In this case report, the surgical approach to be performed after the recurrence of a patient with keratocyst who was operated 3 years ago is presented.

Case: 35-year-old male patient was operated in our hospital in 2018 for a lesion associated with an impacted tooth in the posterior region of the left mandible and a lesion in the ipsilateral ramus region. The biopsy result was reported as orthokeratinized keratocyst. Recurrence was observed in the CBCT image taken at the patient's control 3 years after the operation. Carnoy solution generally used to reduce the risk of the recurrence in the patient. The lesion was enucleated and Carnoy solution was applied to the area with the appropriate protocol. No recurrence was observed in the 2-year follow-up of the patient after the last surgical operation. The patient is regularly followed up.

Conclusion: Keratocysts are odontogenic cysts with a high recurrence rate. The use of carnoy solution used to reduce recurrence is an effective method. However, long-term follow-up of cysts with a high recurrence rate, such as keratocysts, is very important.

Keywords: carnoy solution, odontogenic keratocyst







PP-069 Surgical Approach to Angulus Fracture After Violence: A Case Report

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Objective: Mandible fractures are the most common fractures maxillofacial area. Angulus fractures are particularly difficult to treat due to masticator muscles and impacted teeth. Among the factors of angulus fractures, sports activities take the first place. In the second place, violence comes to the forefront. There are many methods applied in mandible fractures. In this case report, the surgical approach to the angulus fracture, which occurs after violence, is described in accordance with Champy's osteosynthesis theorem.

Case: A 22-year-old male patient, who was referred to our hospital from a private clinic, applied with the complaint of pain after being beaten. As a result of the clinical examination of the patient, it was observed that he felt severe pain especially in the left mandible angulus region while opening and closing the mouth. In the panoramic radiograph, a radiolucent line including the impacted third molar tooth was observed in the left mandible angulus region of the patient. CBCT was requested from the patient. Fracture diagnosis was confirmed with CBCT imaging. IMF was applied to the patient. Under general anesthesia, 1 mini plate was placed in the external oblique line in accordance with Champy. The impacted tooth was extracted before reduction. No change was observed in the occlusion. The patient is being followed.

Conclusion: The mandible is one of the bones of the face that is frequently exposed to trauma. The etiology of mandibular fractures may vary from society to society. However, violence comes to the fore among these etiologies.

Keywords: angulus, fracture, trauma







PP-070 Removal of Foreign Body Invaded Buccal Mucosa After Trauma: A Case Report

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Objective: Foreign body is defined as an object in a tissue or organ that does not belong to that region. Foreign bodies may be involved in the tissue as a result of accident, deliberately or for an iatrogenic reason. After foreign bodies remain asymptomatic for a long time, they are likely to become acute. Foreign matter is usually antigenic and can stimulate a chronic inflammatory reaction that reduces fibroplasia.In this case report, it is aimed to present the diagnosis, treatment and follow-up of a large foreign body found in the right buccal mucosa during clinical examination.

Case: A 67-year-old male patient with systemic hypertension and cholesterol disease was admitted to our clinic with the complaint of a hard foreign body in the cheek region as a result of tree impact 2 months ago. In the clinical examination, the presence of a total prosthesis acrylic piece that had invaded the right buccal mucosa and the overlying mucosa had completely healed was diagnosed. There was no radiographic finding. Under local anesthesia, the foreign body was removed by horizontal incision and blunt dissection in the related area. One week later, he was completely healed and the patient was followed up.

Conclusion: It is very difficult to diagnose the presence of foreign body during the first examination. Often foreign bodies carry micro-organisms and are associated with infection of the wound. Treatment of these injuries involves copious irrigation and is aimed at minimizing the bacterial wound flora and removing any foreign bodies.

Keywords: Buccal mucosa, Foreign body removal, Trauma







PP-071 Impacted Tooth-Associated Odontogenic Keratocyst: A Case Report

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Objective: Odontogenic keratocyst is classified among the developmental cysts of the jaws and is of epithelial origin. Although it is frequently seen in the posterior region of the mandible, it can also be seen in the maxilla. It is aggressive and has the potential for relapse. It may not be noticed until it reaches large dimensions or forms a fistula in the oral cavity due to secondary infection. It can be observed radiologically as unilocular or multilocular. Large lesions are usually multilocular. Unilocular lesions may be observed in relation to the crown of an unerupted tooth. Treatment modalities include marsupialization, enucleation, marginal or segmental resection. In this case report, it is aimed to present the diagnosis, treatment and follow-up of odontogenic keratocyst developing asymptomatically in the posterior region of the mandible.

Case: A 27-year-old male patient without any systemic disease was referred to our clinic from the Oral Diagnosis and Radiology clinic with the preliminary diagnosis of odontogenic cyst in the posterior mandible. In his radiological examination, a regular radiopaque bordered unilocular radiolucent lesion was observed in the posterior right mandible, including the impacted third molar tooth and the inferior alveolar canal. In CBCT examination, it was observed that the lesion had severe destruction of the mandible. The patient was operated under local anesthesia and the impacted tooth was extracted and the total excision of the lesion was performed. In the histopathological examination, the lesion was diagnosed as odontogenic keratocyst. The patient's routine controls continue.

Conclusion: Although odontogenic keratocysts are classified as cysts, they require long-term follow-up after surgery due to their aggressive growth potential and high recurrence rates.

Keywords: enucleation, impacted tooth, odontogenic keratocyst







PP-072

Excision of Complex Odontoma Associated with Wisdom Tooth in Posterior Mandible and Surgical Extraction of Related Tooth: A Case Report

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Objective: Odontomas are the most commonly seen odontogenic tumors; they are hamartomas that are subdivided into complex odontomas, which are masses of calcifed tissue (dentin and enamel), and compound odontomas, which consist of multiple tooth-like structures. Compound odontomas are predominantly seen in the anterior maxilla, whereas complex odontomas are typically seen in the posterior maxilla or mandible. Odontomas are treated with simple enucleation and curettage and are not known to recur. In this case report, it is aimed to present the diagnosis, treatment and follow-up of complex odontoma associated with tooth number 48 in the posterior region of the mandible in radiographic examination.

Case: A 17 year old female patient with no systemic disease applied to our clinic for routine dental examination. In CBCT examination, the 13x11x9 well-circumscribed mixed lesion was observed. There was no pain, swelling or exposure in the related area. The lesion was enucleated under local anesthesia and tooth 48 was extracted. No recurrence was observed in the follow-up of the patient and radiological improvement was observed.

Conclusion: In some cases, there are signs such as delayed tooth eruption, or patients may report pain and present suppuration. Approximately 70% of cases are associated to other conditions, including tooth impaction or malposition as well as malformation, resorption and devitalization of adjacent teeth. Early diagnosis helps the clinician adopt a simpler and less complex approach to treatment and ensures better prognosis.

Keywords: Complex Odontoma, Odontogenic tumor, Posterior Mandible







PP-073 Removal of Wharton's Duct Salivary Stone

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Objective: Salivary stones, also called sialolithiasis, are small calcium and other mineral deposits formed in the salivary glands. Large sialoliths may block the flow of saliva and cause swelling of the affected gland. The condition predominantly affects individuals in 3.-6. decades and is more common in males. In this case, we present the treatment of a salivary gland stone in wharton duct.

Case: A 32-year-old male patient without any systemic disease was admitted to our clinic for a routine examination. No pathological finding was found in the extraoral examination of the patient. A lesion was detected on the floor of the mouth in the left premolar region. On palpation, the lesion was firm and smooth. In the relevant area there was no history of redness, edema, or trauma. It was learned that the size of the lesion did not change while eating, but there was mild pain. An incision was made in the floor of the mouth mucosa under local anesthesia. The stone in the Wharton Canal was removed and the canal was left for secondary healing. The patient was called for a control appointment. No complaints were found.

Conclusion: Sialolith treatment is determined according to its symptoms and location. The salivary stone that causes intermittent obstruction in the submandibular canal may usually be removed by the intraoral approach. In this case, considering the location and size of the salivary stone, removal by intraoral approach was deemed appropriate.

Keywords: Salivary stone; Submandibular gland, Wharton's duct







PP-074 Irritation Fibroma of Hard Palate

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Objective: Intraoral fibrous hiperplastic lesions of soft tissue are widely seen. Irritation fibroma is benign tumors. It is one of the most frequently seen lesion of the oral mucosa. Irritation fibroma develops as secondary to longterm chronic trauma. It is obviously seen on tissues which are chronically exposed to trauma like gingiva, tongue, lower lip and cheek. It can be seen equally in both sexes and in all ages.

Case: A 59-year-old male presented for the evaluation of an asymptomatic acquired lesion on denture on his hard palate of five year. He reported that he had a small lesion 5 years ago and that it enlarged over time. In this case, the sharp irregular edges in the middle of the prosthesis are the irritation factor. This lesion disturbed the patient while chewing and speaking. The patient reported that he had signs of burning because he could not remove his denture for a long time. The denture was removed in our clinic. An intraoral clinical examination revealed a 2.2*1,5*1,2cm, smooth-surfaced, well-circumscribed, pedunculated nodule in hard palate. The lesion was totally excised under local anesthesia without complications and was sent for histological examination. No post operative complications occurred. Histopathological examination has shown dense collagenous fibrosis in the stroma surrounded by keratotic stratified squamous epithelium.

Conclusion: An irritation fibroma or traumatic fibroma is a commonly acquired benign reactive lesion of the oral cavity but rare on the hard palate. Recurrence is not expected when the traumatic factor is removed.

Keywords: irritation fibroma, hard palate, enucleation







PP-075 Zygoma Implant For Rehabilitation of Atrophic Jaw – A Case Report

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Objective: Severe resorption and/or sagging maxillary sinus may be seen in some patients with an edentulous maxilla. There is no bone tissue to provide the necessary anchorage for traditional dental implant application. Zygoma implants are an alternative to reconstructive rehabilitation of atrophic maxilla using bone graft in these patients. Thanks to zygomatic implants, the need for graft applications has decreased. Disorders such as postoperative pain, hematoma and tenderness associated with the donor area, which occur after graft application, are prevented and the duration of treatment is shortened. In this case report, the treatment of a patient with atrophic maxilla and sufficient zygomatic bone width with quad zygoma implants is presented.

Case: A 57-year-old female patient was referred to our clinic for prosthetic reasons. Clinical and radiological examination of the patient was performed. CBCT was taken for insufficient bone for dental implant and detailed radiological imaging. Quad zygoma implants was preferred for atrophic maxilla in the CBCT evaluation.

Conclusion: In severely atrophic maxilla where dental implants and sinus lifting operations are not indicated, prosthetic rehabilitation can be achieved with zygoma implants.

Keywords: zygoma implant, atrophic maksilla, quad zygoma







PP-076 Oral Lipoma

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Objective: Lipomas are benign tumors of mesencyhmal origin that occur most common in soft tissue. 1–4% of lipomas occur in the oral region. Lipomas are usually asymptomatic, slowly growing, mobile, submucosal mass surrounded by a thin fibrous capsule. Although its etiology is reported as trauma, chronic irritation, hormonal imbalance and infection. The cause is not known exactly. Histologically, there are 7 subtypes. The most common are classical lipomas. These masses typically occur in men in their 4th and 6th decades. Lipomas are observed in the buccal mucosa, tongue, floor of the mouth, palate, gingiva, retromolar region and salivary glands. The standart treament protocol for lipomas is surgical enucleation and well prognosed.

Case: A 53 year-old female without any systemic disese was admitted our clinic for feeling stiffness in the upper lip. As a result of the intraoral examination of the patient, a soft, painless lesion was detected on palpation in the upper lip. No pathological findings were found in the radiological examination. The lesion was enucleated under local anesthesia. Histopathological examination was diagnosed as classical lipoma. No recurrence was observed in the clinical follow-up of the patient.

Conclusion: Lipomas may rarely be seen on the upper lip. Recurrence is not expected when the lesion is surgically enucleated completely.

Keywords: oral lipoma, enucleation, upper lip







PP-077

Augmentation of Implant Sites with Insufficient Keratinised Mucosa by Autogenous Soft Tissue Grafting

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Objective: The width and thickness of the adherent keratinized mucosa around dental implants are two important factors for long-term implant stability, function and aesthetics. This is especially important in crests with shallow vestibule depth and insufficient amount of keratinized mucosa and excessive resorption. If immobilized keratinized mucosa is insufficient; Movements of the lips, cheek, and tongue exert a pulling force on the alveolar mucosa and frenulum. This movement may cause biological complications in the tissues around the implant. SDG is defined as a soft tissue graft obtained from the palate and containing keratinized epithelium and some connective tissue and placed in the connective tissue bed prepared in the recipient area. In this case, it was primarily applied to increase developmentally missing or lost keratinized tissue and to increase vestibule depth.

Case: A 53-year-old male patient was sent to our clinic to increase the depth of the vestibule sulcus before overdenture prostheses were applied. We planned SDG vestibuloplasty treatment by taking autogenous graft from the palatal region. The autogenous graft obtained from the palatal region was fixed with a prolene suture to the surgical site, which was left to heal secondarily after vestibuloplasty.

Conclusion: It has been reported in studies that less bone loss can be seen in the presence of thick mucosal tissue around the implant. In our case with insufficient amount of keratinized mucosa, an average increase of 3-6 mm in width was detected. It seems that the SDG operation can be a successful treatment procedure to obtain or increase the width of the keratinized gingiva around implants with a lack of keratinized gingiva.

Keywords: SDG, otogen greft, vestibuloplasty







PP-078 Dentigerous Cyst in Posterior Mandibula

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Objective: Dentigerous cysts develop from the dental epithelium around the crown of an impacted tooth. Dentigerous cysts are usually asymptomatic. The standard treatment protocol for these lesions is extraction of the impacted tooth and enucleation of the cyst. Dentigerous cysts occur over a wide age range with a peak frequency in the second to fourth decades and they are the second most common odontogenic cysts in the jaws. The most frequently involved tooth is the mandibular third molar.

Case: A 42-year-old female patient with FMF disease was admitted to our clinic for routine dental examination. Panoramic radiography showed unilocular radiolucency associated with the impacted 3rd molar tooth in the left mandibular posterior region. The patient was clinically asymptomatic. In the CBCT examination, the left mandibular 3rd molar tooth impacted in the posterior region of the mandible was found to be approximately 23x9x24mm, extending towards the ascending ramus, surrounding the crown of the right mandibular 3rd molar tooth, causing perforation in the lingual bone, well-circumscribed, regular, unilocular radiolucent lesion. The patient was operated under local anesthesia and the impacted left mandibular third molar tooth was extracted and the cyst was enucleated. Histopathological examination was diagnosed as dentigerous cyst in the lesion. During the 6-month follow-up of the patient, no recurrence was observed clinically and radiologically and radiological improvement was detected in the relevant region.

Conclusion: Large dentigerous cysts can be treated by enucleation. Therefore, the treatment decision must be taken appropriately for each case taking into account anatomic site, clinical extent, size, age and follow-up possibility.

Keywords: dentigerous cyst, 3rd molar, enucleation







PP-079 Large Radicular Cyst in Maxillary Sinus

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Objective: Radicular cysts are most common odontogenic inflammatory jaw cysctic lesions. These cysts are usually related to a devital tooth. The radicular cysts is generally asymptomatic, grows slowly, rarely becomes large enough to extensively erode adjacent bony structures and when infected they can cause pain. In our case, a large radicular cyst with maxillary sinus involvement was diagnosed. The cyst was treated with enucleation and closed with a bichat fat pad.

Case: A 51-year-old female patient without any systemic diseases was admitted to our clinic for with swelling on her face. Patient reported that she received antibiotic treatment for 1 week. Radyographic examination revealed 30*22*15mm well-circumscribed, uniloculer, radyolucent lesion in right maxillary sinus. It was seen that tooth number 15 was associated with the cyst and it was decided to be extracted. The cyst was enucleated under local anesthesia. After the enucleation oroantral exposure has determined and the oro-antral communication was closed with bichat fat pad. The lesion was sent for histological examination. Histopathological examination showed as radicular cyst. No recurrence was detected in the follow-up after 6 months radiological controls.

Conclusion: Although radicular cysts are usually asymptomatic, they can give symptoms when infected. Enucleation is a successful method in the management of radicular cysts with a very low recurrence rate.

Keywords: radicular cyst, maxillary sinus, bichat fat pad







PP-080 Osteoma of Maksillary Sinus: A Case Report

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Objective: Osteomas are benign, slow-growing and non-odontogenic tumors. It can be seen at any age and as solitary, multiple. Osteoma in the maxillary sinus is an osteoblastic benign bone lesion that is rarely seen in the literature. Osteomas are usually asymptomatic, but osteomas in the maxillary sinus may present with symptoms such as sinusitis, runny nose, and epistaxis. This case report presents a case of osteoma in the left maxillary sinus of a 33-year-old male patient.

Case: A 33-year-old male patient with no systemic disease applied to our clinic for tooth extraction. In the radiological examination, radiopaque lesion was diagnosed in the left maxillary sinus. In CBCT sections taken for detailed evaluation, a radiopaque structure with cortical borders originating from the floor of the sinus with dimensions of 11*10*9 mm was observed at the floor of the left maxillary sinus. The patient did not have any symptoms. After local anesthesia to the left maxillary region, the mucoperiosteal flap was lifted with a submarginal incision at the level of teeth 24-28. Osteotomy performed from the 26 tooth level. The sinus and the lesion were exposed. The related lesion was sent to the pathology unit for diagnosis. The diagnosis of the lesion was osteoma.

Conclusion: Osteomas are slow-growing benign neoplasms characterized by proliferation of compact or spongy bone. They are found in the head and neck region, where the mandible and paranasal sinuses are most common. Its etiology is still unclear. Most of these tumors are asymptomatic and diagnosed incidentally on imaging studies.

Keywords: osteoma, sinus







PP-081 Greater Epulis Fissuratum in the Anterior of the Mandible: A Case Report

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Objective: Long-term use of total dentures in edentulous patients may cause fibrous inflammatory reactions. Epulis fissuratum is a reactive lesion that occurs due to local irritation of the long-term total prosthesis accompanying residual ridge resorption. In the literature, it is stated that such lesions are more common in the maxilla, anterior part of the labial sulcus, and in women. This case report presents a case of epulis fissuratum of a 66-year-old male patient who has been using the same prosthesis for 25 years.

Case: A 66-year-old male patient was referred to our clinic from the prosthetic dentistry clinic. The patient had no complaints. In the anamnesis, it was learned that the patient used the same prosthesis continuously for 25 years. In the intraoral examination, epulis fissuratum was diagnosed in the anterior region of the mandible, extending from the buccal vestibule to the labial region. Relevant lesion was excised with 15 numbered scalpel and electrocautery, after hemostasis, furocin ointment sponge was sutured with 4\0 vicryl.

Conclusion: Epulis fissuratum occurs in the free mucosa lining the sulcus or at the junction of attached and free mucosa. It is often asymptomatic and may be limited to the tissues around the borders of the dentures in vestibular, lingual or palatal regions. The lesion shows female predilection and it is mostly seen in the maxilla. This case report presents the surgical excision of a case of epulis fissuratum in the anterior region of the mandible in a 66-year-old male patient.

Keywords: epulis fissuratum, mandible







PP-082

Enucleation of Odontogenic Keratocyst in Edentulous Mandibular Region and Treatment of Paresthesia Afterward: A Case Report

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Objective: OKC is an epithelial cyst with rapid growth potential seen in the maxilla and mandible. There are two treatment options. Conservative treatment includes simple enucleation, while radical surgery includes peripheral ostectomy, chemical curettage and resection. Complete removal of OCC may be difficult due to its thin and fragile epithelium, satellite cysts, surgeon's experience, and proximity to anatomical structures. OKC is a highly recurrent cyst. In this case report, it is aimed to present the treatment of cyst and paresthesia developing after an asymptomatic patient who applied to our hospital for prosthetic rehabilitation.

Case: A 50-year-old male patient was admitted to our hospital for prosthetic rehabilitation. Clinical examination revealed asymptomatic buccolingual expansion in the edentulous area of the left mandible. In the radiological examination, a radiolucent lesion with well demarcated was observed in the mandible corpus. CBCT was taken from the patient for detailed imaging. The lesion was enucleated under local anesthesia and the lesion was curetted and sent for biopsy. The biopsy result was compatible with OKC.

Conclusion: OKC is one of the cysts with the highest probability of recurrence, and treatment options such as enucleation, marsupialization and resection are available. Therefore, patients need long-term follow-up.

Keywords: paresthesia, odontojenic keratocyst, mandible







PP-083 Treatment of Radicular Cyst Extending to the Orbital Floor: Case Report

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Objective: Radicular cysts originating from remnants of malesses epithelium are the most common inflammatory cysts. The cyst associated tooth is devital. The treatment of radicular cysts may vary according to the size of the cyst. Root canal treatment, apical resection with enucleation of the cyst are among the treatment options. In this case report, the surgical treatment of our patient who applied to our clinic with the cyst on the apical teeth of 25-26 teeth is presented.

Case: A 29-year-old female patient was admitted to our clinic with a cyst arising from her teeth number 25-26. In the CBCT taken, it was seen that the cyst had elevated the sinus and reached very large dimensions. After the root canal treatment of teeth 25-26 was completed, we performed apical resection and enucleation of the cyst. After enucleation of the lesion, the orbital floor was exposed. The diagnosis of radicular cyst was confirmed by biopsy.

Conclusion: Radicular Cysts caused by necrotic pulp can reach very large sizes if left untreated and may cause complications during and after the surgical procedure due to its proximity to anatomical structures. For this reason, early diagnosis and treatment of radicular cysts is important.

Keywords: radicular cyst, orbital floor







PP-084 Odontogenic Keratocyst: A Rare Case Report

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Objective: The latest (4th) edition of the World Health Organization (WHO) Classification of Head and Neck Tumours, published in January 2017, has reclassified keratocystic odontogenic tumour as odontogenic keratocyst. Odontogenic keratocysts (OKCs), are benign intraosseous lesions of odontogenic origin that account for about 10% of jaw cysts. They are characterised by an aggressive behaviour with high recurrence rate.¹ Radiographically, OKC presents as an unilocular or multilocular radiolucency with uniform sclerotic borders and may be associated with unerupted tooth, more frequently an impacted third molar.² Large OKCs may be associated with pain, edema, or drainage, and multiple lesions are generally related to the nevoid basal cell carcinoma syndrome (NBCCS) (Gorlin-Goltz syndrome).³

Case: A 52-year-old male was referred to our clinic, with a chief complaint of swelling and pain from the right side of mandible. There was a sinüs tract on the lingual side. The panoramic radiography showed a unilocular radiolucency between second premolar and first molar. Teeth were found vital. Full thickness mucoperiosteal flap was reflected on the lingual side and cyst was enucleated. The cystic cavity was curetted and seen "cheesy" material. The histopathological examination confirmed the diagnosis of OKC. Postoperative healing was uneventful and there was no recurrence in the 2nd year postoperatively.

Conclusion: The relatively high recurrence rate, especially after conservative surgery, make it necessary to perform a periodic radiographic monitoring of patients with surgically treated OKCs, at least for the first 5 years.⁴

Keywords: odontogenic keratocyst, enucleation







PP-085 Compound Odontoma: Case Report

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Objective: Odontomas are the most common of the odontogenic tumors of the jaws. They are characterized by their slow growth and no aggressive behavior. Based on radiographic and microscopic characteristic, odontomas are subdivided into compound and complex types. The compuond odontoma forms multiple irregular tooth like structures. The complex type is characterized by dental tissues in a disorderly pattern without any anatomic resemblance to a tooth.¹

Case: A 20-year-old, systemically healthy male patient was referred to us for the lesion seen as a result of routine examination in the oral diagnosis and radiology clinic. In the clinical examination, expansion was seen in the mandible. In CBCT section it was seen that first premolar was impacted and multiple rudimentary tooth-like structures with the invers position supernumerary tooth and these structures were associated with N.alveolaris inferior. After the buccal flap reflection the bone layer removed by burs all tooth-like tumor masses were excised and the impacted teeth were extracted with the enucleation of the tumor. The healing was uneventful in the postoperative 1st month. No paresthesia was observed in the patient.

Conclusion: Odontomas are usually asymptomatic lesions that are discovered incidentally during routine radiography.^{2,3} Treatment for an odontoma is complete removal with any associated soft tissues. Recurrences do not occur. Orthodontic treatment may be indicated to correct any malocclusion.⁴

Keywords: Odontogenic tumor, odontoma, Impacted tooth







PP-086 Tooth Extraction and PRF Application in a Patient Using Intravenous Bisphosphonate: Case Report

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Objective: Bisphosphonates exert their effects by inhibiting osteoclastic activity. It has many positive effects, but as a side effect, it can cause osteonecrosis of the jaw, which affects the quality of life of the patients. Poor oral hygiene, incompatible prostheses, surgical procedures, and the presence of systemic factors affecting healing (alcoholism, old age, diabetes, cancer) increase the risk of osteonecrosis. If surgical procedure is required, the patient should be informed about osteonecrosis. Preventive measures such as regular check-ups and oral hygiene education should be taken.

Case: A 64-year-old male patient applied to our clinic with the request to extract 6 teeth in the lower anterior region. In the anamnesis of the patient, it was learned that he had prostate CA and osteoporosis. The patient had been using intravenous zolendronic acid for 4 years. The patient was informed about the risk of osteonecrosis. Local anesthesia was applied to the area. The teeth were extracted atraumatically. Sharp bone edges were made blunt. Platelet-rich fibrin (PRF) applied to extraction sockets. Extraction sockets were closed primarily. As a result of the patient's 8-month follow-up,no signs of osteonecrosis were detected. The patient's controls are continuing and there are no symptoms.

Conclusion: Before starting the use of bisphosphonates, all necessary dental procedures in the mouth should be performed radically. Dental procedures should be atraumatic in patients who have started using bisphosphonates. If a surgical procedure is required, not leaving a sharp bone edge in the area, applying PRF in the procedure area and closing the area in a primary way are beneficial in preventing the development of osteonecrosis.

Keywords: Bisphosphonate, Osteonecrosis, Platelet-rich fibrin







PP-087 Odontogenic Keratocyst in the Posterior Mandible: Case Report

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Objective: Odontogenic keratocyst originates from dental lamina remnants. It is a noninflammatory developmental odontogenic cyst.1 It differs from other cysts with its high recurrence rate, specific histopathological features and aggressive course.2 It is frequently seen in the angulus and ramus regions of the mandible.3 There are conservative treatments such as enucleation and marsupialization with or without curettage, and aggressive treatments such as chemical curettage with carnoy solution, cryotherapy, electrocautery and segmental resection.1,2,3 In this case report, the follow-up of an odontogenic keratocyst developing in the posterior region of the mandible after marsupialization is presented.

Case: A 42-year-old male patient was admitted to our clinic with swelling in his left mandible. The patient did not have any symptoms. In the CBCT, a radiolucent, unilocular, large lesion with well-defined margins was detected in the posterior left mandible. After local anesthesia, the mucoperiosteal flap was removed from the relevant area. A sample was taken for histopathological examination. As a result of the pathology, it was determined that it was an odontogenic keratocyst. The patient was given an appointment for treatment of the lesion. Due to its relationship with the inferior alveolar nerve and bone resorption in the angulus of the mandible, it was decided to treat it with marsupialization. A window was created in the cyst cavity and a drain was placed. Control radiographs showed an increase in radiopacity at the periphery of the lesion and no symptoms of recurrence were observed. The patient's controls continue.

Conclusion: Odontogenic keratocyst can be successfully treated with marsupialization, enucleation, chemical curettage, cryotherapy and electrocautery. Because odontogenic keratocysts are asymptomatic, it is important to diagnose and treat them.

Keywords: Enucleation, Keratocyst, Marsupialization







PP-088 Nasopalatine Duct Cyst Causing Symptom: Case Report

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Objective: Nasopalatine duct cyst is a developmental nonodontogenic cyst arising from embryogenic epithelial remnants of the nasopalatine duct. Although the cause is not completely clear, it is emphasized that genetic factors, obstruction of the gland duct, trauma and infection may cause proliferation in the cyst epithelium. They are asymptomatic unless they are infected. Its treatment is to completely excising the nasopalatine canal together with the vessels and nerves in it. Recurrence is rare. In this case report, enucleation and follow-up of nasopalatine duct cyst is presented.

Case: A 42-year-old male patient applied to our clinic with swelling and pain in the palate region. Panoramic radiography examination revealed a radiolucent lesion at the apical level of the maxillary incisors. In CBCT examination, a unilocular lesion of approximately 12x12x9 mm in size, with clear borders, regular, homogeneous internal structure, radiolucent, was detected in the apical of teeth 11 and 21. Maxillary incisors were vital. The mucoperiosteal flap was removed after local anesthesia was applied to the relevant area. Enucleation of the cyst was performed. Histopathological examination revealed that the lesion was a nasopalatine duct cyst. No recurrence was observed in the follow-up of the patient and his controls are continuing.

Conclusion: In the nasopalatine canal cyst, the teeth in the relevant region are vital. Correct diagnosis of the lesion is important to prevent unnecessary root canal treatments. It is possible to make a successful treatment with the complete excising of the cyst and the tissues inside the canal. Recurrence is rare in cysts that are completely excised.

Keywords: Embryogenic epithelial remnant, Nasopalatine duct cyst, Nonodontogenic cyst







PP-089 Unilateral Torus Mandibularis in the Lingual of the Mandible: Case Report

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Objective: The torus mandibularis is a bony prominence that is usually seen on the lingual and bilateral sides of the mandible. They are located above the mylohyoid ridge in the canine-premolar region. Although the etiology is not known, it is thought that factors such as genetic factors, environmental factors, increased chewing function, response to functional stresses and continuation of growth may be factors. In this case report, removal of the mandibular torus located on the lingual of the mandible is presented.

Case: A 52-year-old female patient applied to our clinic with the complaint of the bony prominence in the lingual region. In the oral examination, it was seen as a more radiopaque area superposed on the teeth. In CBCT examination, a radiopaque formation was detected in the lingual of the left mandible, measuring approximately 8x12x20 mm. Local anesthesia was applied to the relevant area. The mucoperiosteal flap was removed from the lingual. Torus was removed from the area. No recurrence or symptoms were observed in the region. The patient's controls continue.

Conclusion: If the torus mandibularis is small and does not cause symptoms in patients, they can be followed. They should be surgically removed if they affect the patient's functions, have symptoms, are large, and prevent prosthetic rehabilitation.

Keywords: Exostosis, Mandible, Torus





PP-090 Multilocular Odontogenic Keratocyst in Mandible Angulus: Case Report

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Objective: Odontogenic keratocyst is an intraosseous cyst of odontogenic origin that can be seen as unicystic and multicystic. Although it is asymptomatic, it has a high recurrence rate. They are mostly seen in the mandible corpus and angulus region. Treatment of odontogenic keratocysts is enucleation, marsupialization, decompression, resection or curettage. In this case report, enucleation and curettage of an odontogenic keratocyst in the posterior region of the mandible is presented.

Case: A 46-year-old female patient was admitted to our clinic with a lesion that was noticed during routine examination. In the routine panoramic radiography examination, a multicystic radiolucent lesion extending from the right mandibular posterior region to the ascending ramus was detected. On clinical examination, the patient did not have any symptoms. CBCT examination revealed a large, regular, multilocular lesion with clear borders in the posterior right mandible. Local anesthesia was applied to the area. The mucoperiosteal flap was raised. The bone window was opened, enucleation of the cyst and radical curettage of the area were performed. Histopathological examination revealed that the lesion was an odontogenic keratocyst. The patient's controls are continuing and there is no sign of recurrence.

Conclusion: Odontogenic keratocyst can be treated with methods such as enucleation, radical curettage, decompression, and resection. Since odontogenic keratocysts can be asymptomatic, they should be diagnosed and treated before they show pathological fracture or malignant transformation.

Keywords: Enucleation, Keratocyst, Multilocular






PP-091 Surgical Treatment of Sublingual Sialolithiasis: A Case Report

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Objective: Sialolithiasis is the most common disease of salivary glands. It is related to the submandibular gland in 83%, to the parotid gland in 10% and sublingual in 7% of cases. The main symptoms of the patient with salivary gland calculi are decrease of saliva secretion, pain and dysphagia. In treatment options many techniques can be used but the majority comprises the surgical procedures.

Case: A 57-year-old male patient who had no systemic complaints was admitted to our clinic with complaints of pain during swallowing and unilateral swelling under the chin. On physical examination, there were obvious erythematous swellings over the right mouth floor. In the panoramic and occlusal radiographs taken, a radiopacity of 15x10 mm was detected in the right sublingual area of the mandible. Complete resection of the left sublingual gland with the stone was performed through a transoral approach. The patient was operated under local anesthesia. With an intraoral approach, 15x10 mm sialolith in the right sublingual gland was excised totally. No problem was encountered in the patient, who was given post-operative recommendations. The postoperative course and the functioning of the gland were normal.

Conclusion: Salivary gland stone treatment varies according to the localization of the salivary glands. Small stones close to the drainage channel can be removed manually. To remove those located posteriorly, an incision must be made along the canal or it is large. In this case, the soft tissue was incised, the tissues were dissected and the canal was reached. After the sialolith was excised, the double layer was closed.

Keywords: sialolith, sublingual salivary gland







PP-092 Huge Peripheral Ossifying Fibroma Seen at a Pregnant Patient with Tuberculosis

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Objective: Peripheral ossifying fibroma(pof) usually occurs in female patients at second decade of life. It is seen in maxilla and lesions size generally less than 2 cm. They are asymptomatic color varying from red to pink lesions in soft tissue. Some authors have stated etiopathogenesis as increasing hormones may affect the formation of such lesions during pregnancy.

Case: In this case report, a huge POF lesion, occurred during the pregnancy of a 28-year-old woman is presented. In clinical examination of 7th month pregnant patient, a fibrotic lesion in the right mandibular posterior region was detected, which was large enough to cause extraoral asymmetry. Ossified areas were observed in the radiological examination. It was decided to postpone surgical excision after delivery, since the patient was in 3 trimesters. The lesion continued to grow during this time. It is thought that pregnancy hormones may be effective in the lesion showing such a growth pattern. It was learned that the patient was diagnosed with Tuberculosis(TB). TB treatment was completed. Then the entire lesion and the affected periosteum were excised under general anesthesia until the intact bone margins were intacted.

Conclusion: It was observed that there was an increase in the size of the lesion of the patient, who was intervened late due to pregnancy and TB. There is no definitive information about the effect of pregnancy hormones on lesions, and further research is required.

Keywords: peripheral ossifying fibroma, oral pathology, oral surgery







PP-093 Displacement of Lower Impacted Third Molar Root into the Submandibular Space: A Case Report

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Objective: Accidental displacement of a lower wisdom third molar or its roots into the submandibular space is an uncommon complication. A displaced tooth may remain asymptomatic or cause pain, swelling, paresthesia, and trismus. The aim of this case report is to present displaced mandibular impacted third molar root into the submandibular space that were successfully extracted under local anesthesia intra orally.

Case: A 21-year-old male patient with no systemic disease was referred to the Kocaeli University Department of Oral and Maxillofacial Surgery. The root had displaced to the submandibular space during the extraction of the impacted third molar in the dental outpatient clinic. Conebeam computed tomography scans taken for detailed radiographic examination showed high density areas in the submandibular region. The existing incision was extended superiorly and lingual flep was raised under local anesthesia. The root displaced to the submandibular region was removed by finger manipulation to the mylohyoid muscle and with the help of blunt curette, while preserving the lingual soft tissue. The patient had an uneventful recovery.

Conclusion: Although the treatment of roots displaced into the submandibular space is mostly performed under general anesthesia, they can also be successfully treated under local anesthesia. In these patients, it may be recommended that the manipulation to be applied for the removel of the displaced root should be tried under local anesthesia first.

Keywords: Root displacement, Manuel examination, Third molar tooth







PP-094 Management of Trigeminal Nerve Injuries

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Objective: This review is intended to acknowledge and share some key issues around surgical trigeminal nerve injuries including diagnosis and management.

Materials-Methods: A search was made in PUBMED and Google Scholar databases using the words "Nerve Damage", "Trigeminal Nerve injuries", "Maxillofacial Surgery Complications". From the 81 research articles, 10 review articles and 5 case reports that found, 26 research articles meeting the inclusion criteria were included in the study. Research articles published after 2014, and updated information on the management of nerve damage during oral and maxillofacial surgery was included.

Results: The surgical management of peripheral nerve injuries range from external neurolysis to direct microsuturing, gluing, grafting, tubulization, and laser welding. In trigeminal nerve discontinuity cases, nerve-sparing techniques as well as immediate reconstruction using autogenous nerve grafts or nerve allografts have been reported.

Conclusion: According to these articles, there is no consensus on management of trigeminal nerve injuries.

Keywords: Nerve Damage, Trigeminal Nerve injuries, Maxillofacial Surgery Complications







PP-095

Tentpole technique for bone regeneration in horizontally deficient alveolar ridge: Case Report

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Objective: Insufficient alveolar ridge width after tooth loss causes difficulties in implant surgery. Severe defect areas should be reconstructed before implant placement. The tent pole technique is one of the methods applied for bone regeneration. It is a safe and effective method to increase bone thickness in resorbed ridges.

Case: A 43-year-old, systemically healthy female patient who lost her teeth due to periodontal destruction applied for prosthetic rehabilitation. After the advantages and disadvantages of the treatment options were explained in detail, the rehabilitation of the patient with the implant was planned. After the clinical examination, bone augmentation was planned to the horizontally insufficient and defected area. For hard tissue augmentation, incisions were made in the middle of the crest and the full-thickness flap was lifted. Considering the desired bone contours to be obtained after augmentation, titanium screws were inserted obliquely into the vestibule of the alveolar crest. The grafts and screws were covered with PRF by applying over-contoured to the area in accordance with the sticky bone crest shape. After the flap was freed by making periosteal incisions, it was closed primarily. In the 4th month of the bone augmentation process, the implant surgery phase was started. After the full-thickness flap was lifted and the titanium screws were placed.

Conclusion: The application of the support pole technique is an effective method to improve horizontal ridge size at defect sites, minimize postoperative complications, achieve better patient satisfaction, and support subsequent implant placement.

Keywords: augmentation, implant, tent pole







PP-096

Bilateral Sagittal Split Osteotomy Combined with Genioplasty in the Treatment of Skeletal Class 3 Case Surgery First Approach - Case Report

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Objective: Bilateral sagittal split osteotomy is a commonly used orthognathic surgical technique for correcting mandibular deformities. In addition to creating a well-functioning Class I occlusion, this procedure aims to create a jaw-face profile that is aesthetically compatible with the face, supported by genioplasty. While many cases require pre-operative orthodontic treatment, cases with light crowding can be treated with surgery first approach.

Case: A 38-year-old male patient with complaints of aesthetic concerns related to his lower jaw position, as well as difficulty biting and tearing food and temporomandibular joint sounds, was diagnosed with mandibular prognathism. Cephalometric findings revealed an ANB (-) value.

During the operation, an osteotomy was made that progressed diagonally anterior, buccal, and inferior. The anterior end of the diagonal osteotomy was in the area remaining at the apices of the lower molar teeth. The surgical plate was fixed intermaxillarily with brackets attached to the patient's molars and premolars, and the lower jaw was retracted and stabilized with osteosynthesis screws.

During the genioplasty stage, a soft tissue incision was made from the buccal vestibule. The chin was then reduced by 4mm with bone grinding, using subperiosteal dissection.

Conclusion: After the operation, the patient was prescribed Amoxicillin + Clavulanic acid 1000 mg and Naproxen Sodium 550 mg to be taken every 12 hours. At the 7-day follow-up, the patient's mouth opening was measured at 4 cm, and normal TMJ movements were observed.

Keywords: Sagittal Split Osteotomy, Genioplasty, Reconstructive Surgery







PP-097 Odontogenic Kearatocyst: A Case Report

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Objective: Odontogenic keratocysts (OKC) are an epithelial developmental. This name is known as OKC due to involving keratinized epithelium. On radiography, it is seen as unilocular or multilocular radiolucency with sclerotic border. Its clinical findings are swelling, pain and pus formation. Although marsupialization, decompression, and enucleation have been reported in the treatment of OKC, their combinations have also been described.

Case: 32 year-old male patient applied to our clinic with complaints of swelling and pain in the right mandibular region. Radiographic examination shows unilokuler radiolucency associated with an impacted third molar and extended to the right mandibular ramus. In the evaluation of cone beam computed tomography, the inferior alveolar nerve was appear in direct contact with the cystic lesion. There was no perforation in the lingual and buccal bone cortex. A diagnosis of odontogenic keratocyst was made as a result of the insizyonel biopsy. Enucleation treatment was planned according to the results of histopathological findings. Under local anesthesia, total enucleation of the cystic lesion, curettage of the region and third molar tooth extraction were meticulously performed. Excisional biopsy confirmed the keratocyst result. The patient's no recurrence was observed after 6 months of follow-up and improvement was observed in the 6-month follow-up radiograph.

Conclusion: Odontogenic keratocysts are usually asymptomatic and may reach large sizes. Due to the high rate of recurrence after treatment of odontogenic keratocysts, it is beneficial to perform radical curettage around the lesion. Therefore, long-term follow-up of patients after surgical treatment is necessary. The patient's follow-up continues.

Keywords: impacted molar tooth, keratocyst, enucleation





PP-098 Rare Intraosseous Hemangioma of the Mandibular Bone: A Case Report

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Introduction: Intraosseous hemangiomas constitute approximately 1% of all bone tumors. These benign neoplasms are most commonly seen in the columnar vertebralis and in the skull bones they are most frequently observed in the frontal bones. It is very rare to see it in the jaws. Intraosseous hemangiomas are usually asymptomatic and grow slowly. It is similar to many different pathologies radiologically, for this reason histopathological diagnosis is needed.

Case: The patient, who was referred to our faculty from an external center with CT and MRI records, applied with the complaint of swelling in the mandible causing pain and paresthesia for the last 2-3 months. In the radiological examinations, a multilocular lesion with a diameter of 3x3 cm was observed in the premolar region of the mandible. Biopsy was taken for histopathological examination and tooth no. 36 with caries and luxation in the relevant region was extracted. Hemorrhage was observed in the patient following the suture procedure. Compress was applied to the patient and bleeding was controlled within 1 hour. Local curettage was applied in the treatment of the patient, whose histopathological result was diagnosed as hemangioma.

Conclusion: Intraosseous hemangiomas may appear similar to pathologies such as keratocystic odontogenic tumor or ameloblastoma. Oral and maxillofacial surgeons should pay attention to the possibility that these patholologies may be an intraosseous hemangioma, although it is very rare, and possible serious intraoperative bleeding should be prepared.

Keywords: *intraosseous hemangioma, mandibular bone.*







PP-099

Reconstruction of a Patient with Bilateral Cleft Lip and Palate with Dental Assisted Distraction Appliance

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Introduction: It is seen that the application of the distraction osteogenesis method, which has been successfully applied in the craniofacial region, is gradually increasing in individuals with cleft lip and palate. Surgical procedures such as bone grafting or distraction osteogenesis can be applied to provide a smooth alveolar arch, especially in patients with large cleft palate. Distraction osteogenesis method is successfully applied in patients with large cleft palate that cannot be treated with bone grafting methods. In the current approach, aesthetic, phonetic and functionally acceptable treatment can be provided with dental-supported distraction appliances specially prepared for the patient.

Case: In the clinical and radiographic examination of the male patient with cleft lip and palate who applied to the faculty, bilateral alveolar defect was observed. Archwise distraction appliance was designed in the lab environment after recording with intraoral digital scanning. All existing teeth in the tooth-supported distraction appliance were crowned. A vestibular incision was made in the areas where osteotomy was planned. An osteotomy was performed on the mesial of both first molars. After osteotomy, the appliance was activated and its operation was checked. The appliance was returned to its original position and the primer was closed.

Conclusion: As a result, it was determined that successful results could be obtained in patients with velopharyngeal insufficiency, maxillary hypoplasia and cleft lip and palate with maxillary crowding, especially with the application of alveolar distraction osteogenesis, and that this method could be an alternative to conventional osteotomies and distraction applications with extraoral distractors.

Keywords: cleft palate, distraction osteogenesis, intraoral arch-wise distraction appliance







PP-100 Conservative Treatment of Dentigerous Cyst by Marsupialization in a Young Female Patient: A Case Report

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Introduction: Dentigerous cysts of the oral cavity are odontogenic cysts, attached to the cervical region of an unerupted tooth and enclosing the crown. Their exact etiology isunknown and may be referred to as a follicular cyst. Teeth most commonly affected are mandibular third molars, followed by maxillary canines and mandibular premolars.

Case: A female 24 years of age, came to the Oral and Maxillofacial Surgery Department in the Faculty of Dentistry at Aydın Adnan Menderes University with an enlargement on the right side of the face. Orthopantomogram (OPG) and cone beam conventional tomography (CBCT) show the presence of a large radiolucent cystic lesion with lower third molar include the entire volume of the mandible and extending from the lower right second premolar to take the entire volume of the body of the mandible and ramus toward the coronoid and condylar processes, with radiopaque borders and an impacted third molar in the cyst. After studying the case, it was decided to do the surgery under general anesthesia, and the selected treatment was marsupialization. After one year, complete recovery and remodeling of the mandible are noted.

Conclusion: Treatment of dentigerous cyst can be enucleation and marsupialization. Marsupialization is the conversion of a cyst into a pouch by suturing the cyst lining to the oral mucosa. This conservative method is used, if the preservation of the displaced teeth is desirable, especially in a young patient.

Keywords: Dentigerous cyst, impacted teeth, marsupialization





PP-101 Class III Malocclusion Surgical-Orthodontic Treatment: A Case report

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Objective: Orthodontic treatments combined with surgical operations are usually the first choice in treatment in patients who have completed their growth and development and have severe skeletal disorders.Surgical approach in patients with Class III malocclusion; maxillary advancement, mandibular setback, or a combination of the two.

Case: A 30-year-old male patient applied to Aydın Adnan Menderes University Faculty of Dentistry with the complaint of protruding lower jaw. Orthognathic surgery was planned for the patient with orthodontic treatment. Surgical operation was performed under general anesthesia with Lefort I down fracture technique. Maxilla was advanced 8 mm and 3 mm impacted after, fixed with rigid internal fixation. Mandible set back 5mm with bilateral sagittal split osteotomy. Post-surgical orthodontic treatment involved final positioning of the teeth and settling the occlusion. At the end of the treatment, class I dental and skeletal occlusion and a straight soft tissue profile were achieved.

Conclusion: Skeletal class III malocclusion may result from posterior maxilla, anterior mandible, or a combination of both. In this case report, the treatment process of a patient with skeletal class III malocclusion caused by the maxilla behind the skull base and the mandible forward is described. In the treatment of the patient, orthognathic surgery and orthodontic fixed mechanics were applied in combination, and a smooth soft tissue relationship with skeletal and dental class I relationship was obtained at the end of the treatment.

Keywords: Malocclusion, orthognathic surgery, orthodontic treatment







PP-102

Marsupialization of a Mandibular Dentigerous Cyst and Use of an Intraoral Appliance for the Eruption of Associated Tooth: A Report of Two Cases

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Marsupialisation is the exteriorization of a cystic cavity by making an incision on its' wall, creating a window, followed by suturing the edges to adjacent oral mucosa, thereby creating an opening to the oral cavity to decrease intracystic pressure and halt cystic expansion; promoting bone growth, leading to a gradual decrease in volume. A technique that's widely used in oral surgery, marsupialisation's particularly preferred when the complete removal of the entity puts the integrity of the jaw and sorrounding vital structures at risk. Additionally, because it permits the eruption of involved teeth.

The most prevalent of developmental odontogenic cysts, dentigerous cysts are usually asymptomatic and associated with the crown of impacted teeth.

In this case presentation we report on 2 cases, review a specific instance that made marsupialization the preffered treatment option, hoping to emphasize its' efficacy as a conservative surgical intervention.

Two male patients in their first decade, presented to our clinic with complaints of pain and missing permanent teeth. Upon initial radiological evaluation it was determined that enucleation would cause large defects, jeopardize adjacent structures and require the removal of associated impacted teeth (Figures 1a, 2a). Thus marsupialisation was preferred. Patients underwent biopsies, results coming back as dentigerous cysts. Both cysts substantially decreased in size following marsupialisation, intraoral appliances were made to preserve space in the dental arch for the associated teeth (Figures 1b, 2b, 3, 4). Follow-up times are currently approaching 10 and 12 months, respectively. Teeth associated are currently in eruption (Figures 1b, 2b, 5a, 5b).

Keywords: marsupialisation, removable space-maintainer, tooth eruption

Figure 5.a: Latest intraoral photograph of Case 1. The mandibular second premolar is seen in eruption. Figure 5.b: Latest intraoral photograph of Case 2. The mandibular second premolar is seen in eruption.







PP-103 Root Displaced to Maxillary Sinus: A Case Report

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Objective: The aim of this study was to treat the tooth root displaced into the maxillary sinus with the lateral window technique.

Case: A 46-year-old woman with controlled diabetes mellitus was referred to our clinic due to the displacement of the root into the sinus after extraction of tooth number 25 in an external clinic. The patient presented to our clinic 2 days after the root displacement and complained of pain. Preoperative local infiltrative anaesthesia was performed with a total of 3cc 1/100000 adrenaline containing articaine in the vestibule and palatine. At the apex of tooth number 25, a bone window with a diameter of approximately 1cm was opened in the vestibule, Schneider's membrane was perforated and the root was exposed and removed, followed by irrigation of the sinus cavity with saline. The flap was closed primerally and antibiotics, antihistamines, nasal decongestants, and analgesics were prescribed.

Conclusion: During elevation, forces that push the root towards the sinus or the floor of the nose should be avoided. If it is suspected that the root has migrated into the sinus, radiography should be taken and the localization of the tooth should be determined precisely. For this, occlusal, panoramic radiographs or 3D imaging methods can be used. In order not to cause odontogen-induced infections in the maxillary sinus, primarily teeth with periapical lesions, tooth or tooth fragments should be removed from the maxillary sinus. There are different methods used to remove a foreign body from the sinus. The type of method is determined by the size, shape and location of the foreign body. Caldwell-luc procedure, Lateral window method, endoscopic sinus surgery are commonly used procedures.

Keywords: maxillary sinus, displacement, tooth root







PP-104 Simple Bone Cyst: Case Report

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Objective: Introduction: Simple bone cysts (SBCs), which are very uncommon, are jaw cavities without epithelial linings. It is mostly found in the mandibular corpus, which is between the canine and molar teeth. SBC may be viewed as an empty hollow that may contain some traces of fluid and/or soft tissue. The lesion is typically asymptomatic and was discovered as an accidental finding on radiographic evaluation.

Case: A 20-year-old female was admitted to our department with a complaint of caries in the right first molar. A panoramic radiographic image revealed a large radiolucent lesion in the right posterior mandibular region. The intraoral examination revealed no significant findings. On a cone-beam computed tomography system (CBCT), the related region's cortical bone was seen to be expanding. It was discovered that the patient had never experienced trauma. Her first right lower molar was de-vital. Root canal treatment was done for it. Under local anesthesia, a full-thickness flap was elevated; we had done only curettage since the cavity was empty. The removed lesion was sent for histopathological examination. And it was identified as SBC.We did follow-up control after 3 and 12 months, and in both there was no recurrence of the lesion; complete healing was observed on the panoramic radiograph.

Conclusion: A simple bone cyst rarely expands and is often asymptomatic. The etiology is unknown but is thought to be associated with infection.

Keywords: traumatic cyst, radiolucent region, SBC







PP-105 Enucleation Of Glandular Odontogenic Cyst Relating To A Devital Teeth In The Maxilla: Case Report

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Objective: Glandular odontogenic cyst (GOC) is a relatively rare developmental cystic lesion of the jaws that poses a challenge in diagnosis as well as treatment. Glandular odontogenic cyst is an aggressive lesion. Initial reports used the term sialoodontogenic cyst based on microscopic resemblance to salivary gland tissue, then changed to GOC by the World Health Organization (WHO)^{1.} Small unilocular lesions are treated with enucleation, while biopsy is recommended for large unilocular or multilocular lesions ^{2.} In this case report, a surgical approach is presented for a glandular odontogenic cyst that extends towards the maxillary sinus in the apical of a devital tooth.

Case: A 58-year-old male patient applied to our clinic with the complaints of tooth extraction and swelling in the right part of the maxilla. In radiography and CBCT showed, a well-circumscribed, unilocular, 20x21x19 mm radiolucent lesion extending to the maxillary sinus was detected on the apical part of the #26 devital tooth. The tooth associated with the lesion was extracted, then the cyst was enucleated. Maxillary sinus membrane was intact. The histopathological examination confirmed the diagnosis of GOC.

Conclusion: GOC is a lesion that can reach large dimensions, tend to expansion, and in some cases can cause root resorption and tooth displacement. It is a lesion that is usually seen in the mandible and its incidence increases after the third decade, regardless of gender. Recurrence is seen, therefore, long-term follow-up is recommended.

Keywords: Glandular odontogenic cyst, developmental odontogenic cysts







PP-106 Surgical Removal of the Mucocele in the Lower Lip Mucosa without Rupture: A Case Report

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Objective: Mucocele mostly develops in the lower lip mucosa. The mucocele is present as a clear or blue-gray fluid-filled vesicle, causing the overlying mucosa to appear elevated, thinned, and stretched. The preferred treatment for persistent or recurrent lesions consists of the removal of the mucocele and the associated minor salivary glands that contribute to its formation in order to prevent its recurrence in the same area.¹ In this case report, it is aimed to present the diagnosis, treatment and follow-up of mucocele in the lower lip mucosa in clinical examination.

Case: A 10-year-old male patient with no systemic disease was admitted to our clinic for routine dental examination. In his clinical examination, swelling was detected in the lip mucosa at the level of the left lower anterior teeth and there was no radiographic finding. Under local anesthesia, the lesion, approximately 1 cm in diameter, was completely excised without rupture by blunt dissection. The wound was sutured with 4-0 vicryl. No recurrence was observed in the 6-month follow-up of the patient and clinical improvement was observed.

Conclusion: Mucoceles are mostly due to extravasation of mucus from a salivary gland, although a few are true retention phenomena. Mucoceles are simple to treat and they should not recur if the underlying damaged minor salivary gland has been removed.²

Keywords: Extravasation, Mucocele







PP-107 Removal Of Paste Of Root Canal Filling Material In The Maxillary Sinus: A Case Report

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Objective: Dental implant and root canal materials may also extrude into the sinus, initiating inflammation via a foreign body reaction or by acting as a nidus for bacterial colonization. Surgical removal of foreign matter and partial curettage of the sinus mucosa are indicated to prevent the possibility of sinus infection.¹ This case report describes the removal of infection caused by the root canal filling paste in the right maxillary sinus.

Case: A 50-year-old female patient with no systemic disease was admitted to our clinic with the complaint of persistent headaches. In the radiological examination, a radiopaque body was detected in the right maxillary sinus at the level of the 16th tooth apex. Tooth no 16, which could not be clinically restored and had root canal treatment, was extracted, but no reduction in patient complaints was observed. At the next appointment, the bone was opened from the right maxillary sinus buccal and the foreign body was removed in the first place, and the sinus was completely cleaned and the patient's headache complaints decreased. In the 6-month follow-up of the patient, the sinus healed completely and the complaints did not recur.

Conclusion: In case of maxillary sinusitis, surgical removal of overextended root canal filling material from the maxillary sinus is indicated. No treatment consensus consists for cases without maxillary sinusitis symptoms.²

Keywords: Maxillary sinus, Root canal filling material







PP-108 Management of A Dentigerous Cyst Associated with Kissing Molars: Report of a case

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Objective: Kissing molars (KM) are impacted permanent molars that have occlusal surfaces contacting each other in a single follicular space with roots pointing in opposite directions. Unfortunately, because of the rarity of this clinical finding, it is difficult to propose clinical procedure protocols. In this report, we present the management of a patient with mandibular KMs

Case: A 50 years old man was referred to our clinic with a symptom of pain at his right mandibular molar region. Panoramic radiograph showed the inclusion of the third andfourth lower molars of the right side as KMs with a cyst of the dental follicle (True KMs class I with cystic variant). Cone beam computerized tomography confirmed the data of panoramic radiograph. Surgical intervention was performed under general anesthesia. Care was taken to protect underlying mandibular nerve. Follicular tissue underwent histopathologic analysis. A diagnosis of KMs with dentigerous cyst was made. The patients healed without any complication.

Conclusion: Extractions of KMs are challenging. Preoperative assessment of surgical difficulty is fundamental to correctly plan the extraction of the impacted molars. It was extremely important to assess the various elements that could influence the extraction, such as depth, angulation and form of the roots, number of roots, relationship of the tooth to the ramus and proximity to mandibular canal.

Keywords: Kissing Molars, Dentigerous Cyst







PP-109

Airway Management in Crouzon Syndrome Undergoing Third Molar Surgery Under General Anesthesia

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Objective: Crouzon syndrome is a congenital disease characterized by craniosynostosis, maxillary hypoplasia, shallow, shallow orbit and syndactyly, often as a result of early obliteration and ossification of the coronal and sagittal sutures. Oxycephaly is characterized by scaphocephaly, narrow skull and oblique head structure. Patients with Crouzon's syndrome frequently present for multiple dental and maxillofacial surgeries requiring general anesthesia.

Case: In our case, 1-8% sevoflurane and fentanyl 1 mcg/kg were used for induction. Nasotracheal intubation was achieved by providing partial vision with video laryngoscopy for the case who had a difficult airway due to head size and restricted jaw and neck extension (Stage III according to the Cormack and Lehan laryngoscopic appearance staging). 1-2% sevoflurane, a mixture of 40% O2 and N2O, and fentanyl 1 mcg/kg when necessary was used in the maintenance of anesthesia. The patient, whose operation was completed without any problems, was discharged after 6 hours of postoperative follow-up.

Conclusion: We think that difficult airway applications may be needed in the anesthesia of patients with Crouzon Syndrome, who are candidates for frequent general anesthesia due to surgeries for the correction of existing anomalies, the use of video laryngoscope may be necessary, and the use of inhalation agents such as sevoflurane, which irritates the respiratory tract less, can prevent complications that may develop.

Keywords: Crauzon Syndrome, General Anesthesia, Third Molar Surgery







PP-110 Tooth extraction under sedation in a pediatric patient with Larsen Syndrome: A Case Report

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Objective: Larsen syndrome is a rare congenital connective tissue disease characterized by multiple anomalies. The disease is accompanied by pulmonary and cardiac anomalies.

Case: An 8-year-old patient with Larsen syndrome was referred to our operating room for sedation for tooth extraction. It was noticed that the patient had temporamendibular joint dysfunction due to his current condition. Physical examination revealed bilateral hip and knee dislocations, short neck, flattened nose bridge, prominent forehead, widely spaced eyes, and kyphoscoliosis. Cervical range of motion was normal. Neurological examination revealed moderate hypotonia and fatigue. No pathological finding was found in the cardiovascular and gastrointestinal system evaluation. The patient was evaluated as Mallampati I. The operation was uneventful and sedation was achieved with 50% air, O2 and 4-6% sevoflurane and 0.3 μ g/kg/min remifentanyl.

Conclusion: In patients with Larsen syndrome who have lung failure due to cervical spinal instability and tracheomalacia, operation planning should be done by completing all necessary systemic examinations and taking necessary precautions before anesthesia.

Keywords: Larsen Syndrome, Sedation, Tooth Extraction







PP-111 Adolescent Patient With Temporomandibular Joint Disease Due To Bruxism

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Objective: Bruxism affects between 6-30% of children and adolescents. Its frequency increases with age, reaching a peak at 10-14 years of age.Chewing and other jaw functions aggravate the pain and patients frequently experience limited or asymmetric mandibular movements. Associated symptoms are headache, neck pain,toothache, joint sounds and pain during mouth opening. TMD pain is common in adolescence. Psychosocial comorbidities have been found to contribute to the onset and persistence of TMD pain.

Case: A 16-year-old adolescent patient with no sistemic disease was admitted to our clinic with the complaint of pain in front of the left ear. He reported that his orthodontic treatment was finished 6 months ago, he had bruxism and pain in front of the left ear for the last 3 months. He reported that although he has been using hard-based biteplate for the last 3 months, his pain has increased and his mouth opening has decreased over time. In the clinical examination, pain on palpation and mouth opening was observed. The mouth opening was measured as 28mm. Cbct examination revealed degenerations in the left mandibular condyle head. Arthrocentesis was performed with the Nitzan technique and the double needle method on the left temporomandibular region. In the 1st month and 2nd month follow-ups, it was observed that the pain decreased and the mouth opening increased to 39mm.No clicking sound and deflexion/deviation were observed.

Conclusion: Degenerations in the temporomandibular joint can also be seen in adolescent patients. Arthrocentesis procedure provides a decrease in pain and an increase in mouth opening.

Keywords: tmd, bruxism, arthrocentesis







PP-112

Anesthesia Management in a Patient with Fahr's Syndrome Underwent Mandibular Fracture Surgery: A Case Report

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Objective: Fahr's syndrome is a neurodegenerative disease characterized by symmetric intracranial calcifications in areas such as the cerebellum and basal ganglia. Detection and treatment of hypocalcemia in this disorder, where calcium and phosphorus metabolism is impaired, is important for anesthesia application.

Case: A 62-year-old male patient, who was planned for mandibular farcture repair, had complaints of parathyroid gland excision and subsequent contraction of the upper and lower extremities, occasional loss of consciousness, irritability, speech disorder, and forgetfulness in the operation performed for neck trauma 41-years ago. Tt was determined as calcium: 5.6 mg/dL, sodium: 142mmol/L, potassium: 4.3mmol/L, chloride: 105mmol/L, parathormone: 3.4pg/ mI. phosphorus: 6.8mg/dL in the preoperative laboratory examination. Preoperative brain tomography revealed intense calcification in the basal ganglia and cerebellar hemispheres. Preoperative neurology, internal medicine and cardiology consultations were made, and the patient underwent surgery when the calcium level increased to 9.0 mg/dL by applying calcium replacement. The patient was intubated in the third attempt in the patient who had difficult intubation. Bradycardia developed at the 10th minute intraoperatively. Atropine was administered intravenously. At the end of the operation, which lasted for two hours, the patient was awakened and transferred to the service without any problems.

Conclusion: In cases of Fahr's Syndrome intubation difficulty due to insufficient mouth opening may also be seen, as well as cardiac instability.Since hypocalcemia increases the neuromuscular blocking effect in terms of muscle relaxants, it is recommended to reduce the blood calcium level to normal limits before the operation and to replace the calcium by titration.

Keywords: Fahr's Syndrome, General Anesthesia, Hypocalcemia







PP-113 Venous Lake: A Case Report

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Objective: Intravascular papillary endothelial hyperplasia (IPEH), first described by Masson in 1923, is a non-neoplastic disease characterized histopathologically by papillary proliferation of vascular endothelial cells. Lesions usually occur on the skin, but are rarely seen on the mucous membranes of the mouth, lips, and gingiva. The pathogenesis of IPEH might be related with inflammation or mechanical stimulus such as irritation.

Case: An 11-year-old girl patient with no health problems was admitted to our clinic due to gingival growth. A purple-red lobular lesion was detected located on the vestibular gingival margin of the right central tooth of maxilla. The hemorrhagic, non-pediform lesion was excised. A diagnosis of intravascular papillary endothelial hyperplasia was made as a result of histopathological examination.

Conclusion: The pathogenesis of Masson's tumor is still unknown but, it is believed to result from reactive proliferation of blood endothelial cells caused by an abnormal process of organization in thrombosed blood vessels. It may have different clinical and symptomatological presentations, therefore it is very important to make an accurate differential diagnosis from malignant tumor such as angiosarcoma, malignant endovascular papilloma.

Keywords: endothelial hyperplasia, hemangioma, gingival growth





PP-114

A Critical Assessment of the Current Literature on Odontogenic Sinusitis, A case report and literature review

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Objective: Odontogenic Maxillary Sinusites (OMS) is a disorder that is well- known in the dental and otolaryngology communities. An underlying dental pathology may be present in about 30% of instances of unilateral maxillary sinusitis. Recent evidence suggests that endoscopic sinus surgery alone may be an effective treatment for odontogenic sinusitis, despite the fact that numerous studies have emphasized dental surgery as the primary treatment modality. The purpose of this study is to describe the results in the literature on odontogenic maxillary sinusitis, including anatomy, epidemiology, origins, bacteriology, being diagnosed, and management.

Case: A 50-year-old woman presented with recurrent infection in the upper left side of the maxilla. Additionally, she complained of persistent rhinorrhea and facial discomfort on the left side. She had presented with comparable right maxillary pain after having root canal therapy performed on the upper left 5 and 7 teeth several years previously. A computed tomography (CT) scan revealed sinus opacification and (3) an oroantral fistula with an enlarged area around upper left 6 consistent with an abscess cavity, validating the diagnosis of odontogenic maxillary sinusitis. In order to effectively treat odontogenic sinusitis, a combination of medical therapy, dental surgery, and/or endoscopic sinus surgery was performed.

Conclusion: After endoscopic sinus surgery, the Caldwell-Luc procedure appears to be very effective in the treatment of medically resistant chronic sinusitis.

Keywords: Odontogenic sinusitis, Cald-well, Functional endoscopic sinus surgery







PP-115 Large Radicular Cysts Of The Mandible:Case Report

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Turkey

Introduction: The diagnosis, treatment and clinical follow-up of patient with radicular cyst in the anterior mandible was presented in this case report.

Case Presentation: A 46 years old female patient who referred to Van Yüzüncü Yıl University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery with a complaint of swelling in the anterior mandible. Clinical examination showed non-vital teeth with mobility grade 1 in the anterior mandible. And the patient had swelling in the lower buccal region. The well-demarcated radiolucent lesion was discovered during the patient's radiological evaluation. After performing an endodontic treatment of the affected teeth, under local anesthesia, full thickness flap was removed and lesion was totally excised. The lesion was histopathologically diagnosed as radicular cyst.

Conclusion: During the 1-year follow-up period, recurrence and patient complaint was not reported.

Keywords: Radicular cyst, inflammation cyst, mandibular







PP-116 Delayed Bone Healing Caused by Bruxism: A Case Report

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Objective: Bruxism, a common parafunction, can cause a wide variety of complications. In this case report, the complications experienced due to bruxism and the delay in bone healing after postoperative surgery of a patient with a diagnosis of osteoma will be presented.

Case: A 34-year-old female patient was admitted to our clinic with the complaint of recently exacerbated intense pain in the right mandibular region. In the radiological examination, an irregular radiopacity of approximately 5x7x8mm in size, localized around the mandibular canal, at the apical of the implant was detected. The patient was also found to have bruxism. Excisional biopsy of the relevant lesion and removal of the implants were planned under local anesthesia. Histopathological examination revealed that the lesion was an osteoma. The patient came to our clinic with a displaced mandibular corpus fracture due to bruxism in the post-op 4th month. Fracture fixation was performed with 2 plates and screws under general anesthesia. During the follow-up period, fractures were observed in one of the plates in the post-op 3rd month and the other plate in the post-op 10th month. Botulinum toxin was applied to the masseter muscle to eliminate the force caused by bruxism. Bone healing of the resulting mandibular fracture was completed in about 3 years.

Conclusion: In the treatment of maxillofacial region lesions, correct management of clinical, radiological, and histopathological evaluation is essential. However, the presence of bruxism in patients is also a condition that should be addressed separately.

Keywords: bruxism, mandible fracture, botulinum toxins







PP-117 Two Different Lesions in The Same Pathological Cavity

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Objective: Peripheral giant cell granuloma (PGCG) and peripheral ossifying fibroma(POF) are reactive lesions of the gingiva originating from the periodontal ligament. These lesions can often develop secondary to an irritant factor such as calculus or trauma. The lesions may be clinically pedunculated or sessile, red-purple in color and ulcerated on the surface. These lesions are frequently seen in female patients. Overall, 60% of POFs occur in the maxillar, especially in the incisor-canine region. The histopathology of POFs is a fibrous proliferation associated with the formation of a mineralized product. In contrast to POF, a PGCG shows multinucleated giant cells proliferation against a background of plump oval and spindle-shaped mesenchymal cells.

Case: An 80-year-old male patient was consulted to the Department of Oral and Maxillofacial Surgery, Hacettepe University, Faculty of Dentistry, due to a solid, painless swelling in the anterior maxilla. Intraoral examination revealed a solitary, pedunculated, pale pink exophytic growth on the edentulous alveolar crest in the anterior of the right maxilla. The lesion had completely excised and examined pathologically. Specimen was described as a hybrid lesion which presents charactetistics of both, peripheral giant cell granuloma and peripheral ossifying fibroma.

Conclusion: PGCG and POFs are classified as benign soft tissue tumors of the jaws. Definitive diagnosis can be achieved with histopathological examination. Peripheral ossifying fibroma (POF) is believed to comprise about 9% of all gingival growths. The treatment of the peripheral giant cell granuloma and peripheral ossifying fibrom consists of local surgical excision down to the underlying bone.

Keywords: peripheral giant cell granuloma, peripheral ossiying fibroma







PP-118 Case report of osteomyelitis of the mandible in osteopetrosis patient

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Objective: Osteopetrosis is a hereditary disorder characterized by defective osteoclastic function and impaired bone resorption resulting in dense bone. Diagnosis is usually based on radiological and clinical observations after a separate complication such as fracture or infection. Osteosclerosis is visible radiologically, in particular with loss of the corticomedullary gradient. One major complication of osteopetrosis is osteomyelitis of the mandible, which concerns 10% of the patients. Persisting mandible exposure, necrotic bone sequester, basilar rim fistula, mandible bone suppuration and mandible adjacent collection are classically observed. Management involves antibiotic therapy and surgical treatments including tooth extraction, necrosis sequester removal, abscess drainage or fistulas cures.

Case: A 45-year-old female was referred to our Department of Oral and Maxillofacial Surgery for chronic submental fistulas and mandibular bone exposure. The symptoms started spontaneously without any dental intervention. The patient expressed a history of bone disease in her family, but was referred to the medical department because she did not have knowledge about diagnosis and treatment. After the detailed examinations, the patient was diagnosed with osteopetrosis and was referred to our faculty. Doxycycline 100mg, Pentoxifylline 400mg and D-alfa tocopherol were prescribed after Sulcid 1gr (ampicillin+sulbactam) injection for one week. It was observed that the purulant exudate stopped after two weeks and the exposed bone was closed with soft tissue in the one- month follow-up.

Conclusion: Mandibular osteomyelitis is a frequent complication of osteopetrosis. This case report highlights the importance of maintaining the existing mandibular bone with a combining antibiotic therapy.

Keywords: mandible, osteopetrosis, osteomyelitis







PP-119 Dentigerous cysts of mandibular ramus area with erupted teeth: A case series

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Objective: Dentigerous cysts are a type of dental cyst that typically forms around the crown of an unerupted tooth, and they are one of the most common types of odontogenic cysts seen in dental practice. Dentigerous cysts can be asymptomatic and are often discovered incidentally during routine dental examinations, or they can cause symptoms such as swelling, pain, and difficulty opening the mouth. Treatment options include enucleation, marsupialization, and decompression, and the choice of treatment depends on the size and location of the cyst.

Case: A case series study was conducted on five patients who had huge dentigerous cysts at the left mandibular ramus. The cysts were discovered during routine dental examinations and confirmed through radiographic imaging. The patients were all adults, and their ages ranged from 24 to 73 years old. All five patients underwent surgical treatment to remove the cysts and removed erupted teeth. The treatments were successful, and the patients experienced no complications post-surgery.

Conclusion: In conclusion, the case study highlights the importance of routine dental examinations and radiographic imaging detection of dentigerous cysts. Timely surgical intervention can prevent serious oral health complications and ensure a successful outcome for the patient.

Keywords: Dentigerous cysts, mandible, erupted teeth





PP-120

Multiple Temporomandibular Joint Dislocations After Trauma and Past Open Joint Surgery: A Case Report

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Objective: After temporomandibular joint (TMJ) traumas and open joint surgeries, patients may experience problems due to the changed anatomy of the region. This case report aimed to present the reductions of multiple TMJ dislocations under general anesthesia after previous TMJ surgeries.

Case: A 37-year-old convicted male patient was referred to our clinic with the complaint of bilateral TMJ dislocation lasting 45 days. In the history taken; It was learned that he had a superficial gunshot wound in the left TMJ region and was operated on, and then an eminectomy operation was also performed in a different center due to multiple TMJ dislocations. The patient, who also has epilepsy, informed that TMJ dislocations, which may occur due to convulsions due to epileptic seizures after eminectomy, could not be reduced under local anesthesia in the health institutions that the patient applied to before. Under general anesthesia, we reduced the dislocated condyle up to the glenoid fossa and then ended the treatment by applying a bandage restricting jaw movements to the patient. The patient was admitted to our clinic again 1 month later with the complaint of bilateral dislocation after an epileptic seizure. The dislocated condyles were successfully reduced again and bandaged under general anesthesia.

Conclusion: After open joint surgeries performed for the treatment of trauma and TMJ dislocations, patient comfort may be adversely affected by the effects of systemic diseases. Reduction under general anesthesia is recommended for mandibular dislocations that cannot be reduced under local anesthesia.

Keywords: Dislocation, Reduction, Temporomandibular joint







PP-121

Evaluation of implant supported prosthetic alternatives on the impact of oral health' in rehabilitation of edentulism, a preliminary study

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The aim of is study is to evaluate and compare the effects of implant supported overdenture and hybrid prosthesis on individuals' oral health impact profile.

This study included edentulous patients who had been treated with dental implants with planning of overdentures or hybrid prosthesis at Hacettepe University Department of Oral and Maxillofacial Surgery between October 2012 and March 2022. Participants divided into groups according to the type of prosthetic rehabilitation as hybrid and overdenture prosthesis. Enrolled OHIP scores and peri-implant health status of the patients during the follow-up period were evaluated. According to results of the current preliminary study; the hybrid prosthesis was found to have higher OHIP scores, especially on the aspects of patient's physical, psychological, and social well-being, compared to the overdenture group regardless of the peri implant status of health. In addition to this, OHIP scores had been tendency to decrease with in existance of peri-implantitis in both groups. On the other hand, it should be noted that the study was conducted with a small group of participants and not all of the prostethic alternatives using in rehabilitation of edentuolism were included. In addition to this, variables such as socioeconomic status, gender, age and patients previous dental status and perceptions should have been taken into account.

Keywords: OHIP-14, Peri-Implantitis, Prosthetic Alternatives Of Edentualism





PP-122

Medication Related Osteonecrosis of the Jaw in a Multiple Myeloma Patient: A Case Report

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Objective: Medication-related osteonecrosis of the jaw (MRONJ) is a severe drug-related side effect mostly seen in the maxillofacial region of patients under current or previous treatment with antiresorptive and/or angiogenic agents. There is a wide range of treatment options explained in literature for the management of this condition, from conservative treatments to surgical procedures of various levels of invasiveness, which are sometimes supplemented with adjunctive therapies. The present systematic review aimed at evaluating the treatment options of MRONJ in terms of successful outcomes.

Case: A 59 year-old female patient, who has been diagnosed with multiple myeloma and used iv bisphosphonate, applied to our clinic with the complaint of pain in the necrotic exposed bone without any purulant exudate that developed after tooth extraction. After the examination, the patient was prescribed Pentoxifylline 400mg and D-alfa tocopherol antibiotherapy. While under antibiotic treatment, lower left secondary molar which was inside the necrotic bone was extracted. Following the resolution of the patient's complaints, the sequestered mobile necrotic bone was completely removed and the gingiva was closed primarily. In the 2-week follow-up, it was observed that the patient did not have any complaints and the soft-tissue completely healed.

Conclusion: Medication-related osteonecrosis of the jaw (MRONJ) is a complication we can see in osteoporosis patients. This case report highlights the importance of right prescription and timing of the surgical treatment in these patients.

Keywords: mandible, multiple myeloma, osteonecrosis







PP-123 Residuel Tooth Root and Fungal Infection in the Maxillary Sinus: A Case Report

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Objective: One of the complications of tooth extraction is the migration of the tooth into the maxillary sinus. It is usually caused by the proximity of the tooth to the sinus floor and the thinness of the bone between the tooth and the sinus. When such a situation occurs, radiography should be taken to determine the position of the tooth and the tooth should be extracted with the appropriate surgical technique. In this case report, it is aimed to present the excision of the tooth root and surrounding lesions from the maxillary sinus.

Case: A 61-year-old female patient with hypertension was admitted to our clinic with complaints of pain in the right upper jaw and right half of the face. In the radiological examination, residual tooth roots were observed in the right maxillary sinus and in the alveolar crest in tooth region 17. In addition, an increase in radiopacity was observed in the sinus. The root of the tooth in the alveolar crest was extracted under local anesthesia and the root in the sinus was removed with the Caldwell-Luc approach. A biopsy was taken from the sinus. Histopathological examination revealed a fungal infection in the maxillary sinus. The patient was referred to the Department of Otorhinolaryngology for a more detailed examination. Patient controls continue.

Conclusion: When it is noticed that the tooth has migrated to the maxillary sinus during tooth extraction, it is necessary to locate and remove the tooth. In this way, more severe complications that may occur in the future can be prevented.

Keywords: fungi, infection, sinus





PP-124 Bichat's Fat Pad's Versatility and Importance in Dentistry: A Case Report

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Benign odontogenic cysts known as dentigerous cysts are connected to the crowns of unerupted teeth. They are often found during a normal dental radiography examination and present with no symptoms. Even though radicular cysts are the most frequent odontogenic cysts, nonsyndromic bilateral and multiple dentigerous cysts are uncommon. Numerous disorders may be associated with bilateral and multiple cysts. The surgical management of a nonsyndromic bilateral dentigerous cyst is described in this article. Under general anesthesia, bilateral dentigerous cysts were excised, and the concomitant impacted teeth were removed. For the closure of the oro-antral connection, a double layer reconstruction with vascularized Bichat fat pad was carried out. Based on radiological information, the probability of the defect being filled by Bichat fat pad was made. Large bone defects may be produced by dentigerous cysts asymptomatically. Therefore, radiographic evaluation of all unerupted teeth is crucial.

Keywords: Dentigerous Cyst, Bichad fat pad







PP-125 A complication following submandibular abscess with delayed surgical drainage

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Objective: The management of odontogenic infections is a typical part of the spectrum of maxillofacial surgery. Normally these infections can be managed easily however under certain conditions severe and complicated courses can arise which may require hospitalization of the patient. When the periapical abscess bursts on the skin, it results in formation of an extraoral fistula.

Case: 56 year old male patient referred to our department for extraoral swelling, fever and pain. According the examination submandibular lodge abscess related to tooth number 44 was determinated. Patient was prescribed iv ampicillin sulbactam(100mg 3x2) and oral metronidazole(500mg 2x1). The next day, an incision was made with the number 11 scalpel for drainage of extraoral abscess and blunt dissection was performed with a hemostat. A drain was sutured with a 4-0 prolene suture to ensure continuity of drainage. When the patient came to control after two days, severe pus flow and tissue loss were seen. Soft tissue thought to be platysma was visible from mouth of fistula, but the soft tissues of mandible were intact. We decided to hospitalize the patient in order to control wound care. Ampicillin sulbactam(1000mg 3x2) and metronidazole(500mg 3x1) were given during the three-day hospitalization period. After the suppression of the infection, discharging of the patient was decided. Fistula closed by secondary healing and exsudative fluid dried in ten days. One week later tooth number 43 and 44 were extracted.

Conclusion: Surgical treatment should be done without delay in lodge abscess, otherwise more difficult situations to treat may occur.

Keywords: logde, submandibular, treatment







PP-126 Radiographic Evaluation Before Subperiosteal Implant Design with Cases

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Objective: Adequate bone volume is needed in both vertical and horizontal directions for the ideal application of intraosseous implants. Advanced implant surgery techniques are used where this volume is insufficient for various reasons. As an alternative to these techniques, subperiosteal implants are becoming widespread today.

Case: Subperiosteal implants can be applied to advanced atrophic jaws, placed under the periosteum, and fixed to the jawbones using fixation screws. Subperiosteal implant application is of great importance in the preoperative radiographic evaluations of the patients, both in the implant design and in the planning of the localization of the fixation screws. These important points will be evaluated in our cases.

Conclusion: Important anatomical locations such as the mental foramen, maxillary sinus, aperture piriformis, and inferior alveolar nerves directly affect the design and screw placement areas. This poster presentation emphasized what should be considered in the radiographic evaluation before subperiosteal implant design and its effects on design and surgery.

Keywords: implant design, radiographic evaluation, subperiosteal implants






PP-127

Surgical Treatment with DO for congenital maxillomandibular syngnathia: A case report

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Objective: Maxillomandibular fusion (syngnathia) is a rare anomaly of craniofacial area. It can happen as either fibrous (synechiae)or bony (synostosis) fusion of jaws. Problems associated with Airway and feeding are the very primary complications.

Case: A 3 week old male baby was presented in NICU section giving reports of inability to open his mouth since birth.

Clinical and Ct-scan examinations revealed thorough maxillomandibular fusion at occlusal level. Micrognathia of mandible was another complication as well. Feeding was operated by NG tube and respiration was performed with the help of tracheostomy.

Adhesion to coronoid process and zygomatic arch was illustrated. Patient underwent an IV sedation followed by General Anesthesia.

A submandibular approach was made to access the bony fusion. Then a cut was made just at the occlusal level, followed by osteotomy of the same line to separate maxillary and mandibular segments as well as separating the coronoid and the zygomatic arch. The separation was performed successfully and a relative MMO of 20 Mm was achieved. There was a splint made during surgery to help with keeping the MMO stable, which was placed immediately after the osteotomy was completed. A DO device was also previously designed for accelerating the mandibular growth which was placed at mandibular body region of both sides to help with mandibular advancement and keep the airway open.

Conclusion: Congenital bony fusion of the jaws (bony syngnathia) is considered to be a rare phenomenon. This condition needs urgent care for helping with the Feeding and Airway problems.

Keywords: Syngnathia, jaw fusion, synechia





PP-128

Marsupialization of an odontogenic keratocyst, which is resembling as an adenomatoid odontogenic tumor and correction of tooth crowding: A case report

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Objective: The adenomatoid odontogenic tumour (AOT) is a rare benign neoplasm of odontogenic origin seen in ages 10 to 28. With a ratio of 3:2, females are affected more than males. 65 % of cases are reported in the maxilla and 34.4% in the mandible, the majority of which (92.3%) are located in the anterior region of the jaws. 66.7% of the cases are associated with unerupted teeth. Odontogenic keratocyst is seen in the posterior region of the developed mandible and is often observed with impacted teeth. In this case, we will talk about an odontogenic keratocyst, which is resembling to adenomatoid odontegenic tumor.

Case: A 17-year-old female patient, who has admitted to our clinic with complaints of swelling in the anterior maxilla and crowding of teeth in anterior maxilla. To determine the size of the lesion, CBCT was taken. In the images, we observed that it was accompanying with the impacted tooth number 13, raising the floor of the nose, and filling the right maxillary sinus almost completely. The lesion was located between teeth 23 and 17. The treatment consisted of totth extraction and marsupialization first then following enucleation in a 9 month period.

Conclusion: The pathology result was compatible with odontogenic keratocyst. After 9 months, as the lesion got smaller the vertical alignment of anterior teeth were correct.

Keywords: crowding of teeth, odontogenic keratocyct, marsupialization







PP-129 Posterior Disc Displacement without Reduction of the TMJ: A Rare Case Report

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Objective: Posterior disc displacement of the temporomandibular joint (TMJ) occurs when the articular disc located between the mandibular condyle and the zygomatic bone is displaced from its normal position and moves posteriorly. This condition can cause a range of symptoms, including pain, clicking or popping sounds when opening or closing the mouth, limited jaw movement, and even lockjaw. The causes of posterior disc displacement can vary, but common factors include trauma to the joint, habitual clenching or grinding of teeth, and a misaligned bite. The condition can be diagnosed through physical examination and imaging tests such as MRI. Treatment options for posterior disc displacement depend on the severity of the condition and may include a combination of non-surgical and surgical approaches.

Case: The patient is a 45-year-old female. She had a vehicle accident about 4 years ago. One year after the accident, her mandible started to shift to the right as he was closing her mouth, and a clear asymmetry occurred on her face. Asaresultoftheexamination, posterior disc displacement in the left TMJ was considered. The diagnosis was confirmed as a result of MRI. Arthrocentesis was performed first, but no benefit was seen. Afterwards, the patient underwent discectomy. Physical therapy was recommended to the patient.

Conclusion: Posterior disc displacement is a rare condition. If the correct diagnosis is not made, wrong treatments can be applied.

Keywords: posterior disc displacement, tmj, facial asymmetry







PP-130 Klippel Feil Syndrome: Maxillofacial Surgeon's perspective

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Objective: Klippel-Feil Syndrome(KFS) is a rare genetic disorder characterized by the abnormal fusion of two or more cervical vertebrae during fetal development. This fusion can result some common symptoms such as short neck, low hairline at the back of the head, limited neck movement, scoliosis (curvature of the spine), hearing loss, and abnormalities of organs (kidneys, heart and etc). In this case report, treatment of patient with Klippel Feil Syndrome by orthognatic surgery will be presented.

Case: This case report describes a typical 28-year-old female patient with skeletal Class III maxillo-mandibulary deformity, facial asymmetry, ear tags and finger deformities. The patient had limited mouth opening because of coronoid hyperplasia, which caused dysfunction in their nutrition and particularly in her speech. The patient has a short neck and limited range of motion due to an anomaly in the cervical vertebrae (torticollis). A winged-like appearance is observed in the trapezius muscle, and the scapula has moved upwards (Sprengel's deformity). Diagnosis was based on clinical aspects and radiological findings. Double jaw surgery performed. Advancement and acymetric impaction were performed for maxilla also mandibulary set- back was done during this procedure. And also bilateral coronoidectomy was performed at the same time. No complications were encountered in perioperative period. The patient's condition is stable and their mouth opening is at an acceptable level at the sixth-month follow-up.

Conclusion: KFS is a developmental abnormality that can disturb many aspects of the patient's life. Systemic deformities can make the procedures more challenging. The treatment protocol should be planned meticulously.

Keywords: Facial Asymmetry, Klippel Feil Syndrome, Torticollis







PP-131 Alveolar Reconstruction Techniques: A Case Series Comparison

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Objective: Rehabilitation of partial and total edentulism with dental implants has become a routine treatment modality. However, alveolar bone deficiencies can be challenging to provide functional, biological, and esthetic expectations. There are many different treatment modalities for the reconstruction of alveolar bone defects. This presentation aims to compare the most common alveolar reconstruction techniques in terms of complications, challenges, and outcomes.

Case: Patients who applied for dental implant treatment but did not have sufficient horizontal and/or vertical alveolar bone were included in this case series. After clinical and radiographical examination, different alveolar reconstruction techniques, such as autogenous bone graft, alveolar ridge split, tent-pole technique, and guided bone regeneration with resorbable/non-resorbable membranes, were performed under local anesthesia. Treatment methods were evaluated regarding challenges with surgical technique, cost-effectiveness, and complications during the healing process.

Conclusion: The approach used for alveolar bone reconstruction mainly depends on the type of deficiency and soft tissue management. The surgeon's experience, choice of most suitable biomaterials, and patient motivation are also critical for predictable treatment outcomes. An evidence-based approach should be preferred in the decision-making process regarding alveolar bone reconstruction.

Keywords: alveolar reconstruction, bone regeneration, dental implants







PP-132

Evaluating the Efficacy of Vertical Interpositional Bone Grafting Technique in a Case Series of Four Patients

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Objective: The present study aimed to evaluate the clinical outcomes of the vertical interpositional bone grafting (VIBG) method using xenograft blocks for alveolar ridge augmentation in regions with significant vertical bone defects.

Methods: The present case series included four patients (6 quadrants: 2 in the maxilla and 4 in the mandible) with severe vertical alveolar bone defects. Bone cuts of all patients were performed using a piezo-surgery device. To determine the bone gain after the surgery, Radiographic measurements of the bone height on the augmented region were performed on cone beam computed tomographic radiographs of the patients, which were taken before and 3.5 to 12 months later the operations.

Results: The postoperative mean vertical bone gain was 3.63 ± 1.18 mm. No significant complications such as infection, dehiscence, or graft failure were reported during follow-up periods.

Conclusion: Within the limitations of the present case series, the VIBG technique showed promising results in treating patients with severe vertical alveolar bone defects. Placement of the block xenograft between two pedicled bone surfaces and performing the osteotomies using a piezo-surgery device could promote remarkable bone gain without significant complications. Further studies, including the comparison of the effectiveness and complication rates of other vertical bone augmentation techniques and VIBG in the long term, are needed to determine all aspects of the method.

Keywords: Vertical interpositional bone grafting, ridge augmentation, regenerative dentistry







AÇBID - NEXT GEN







Elif Özcan

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Intranasal Procedures in Orthognathic Surgery

In the case of performing Le Fort I osteotomies, postsurgical patency of the airway should be considered. At the time of orthognathic surgery, the surgeon has an opportunity to further contribute to the patient's quality of life by addressing breathing and sinus drainage difficulties that coexist with the jaw deformity.

Breathing difficulties may range from isolated symptomatic nasal airway obstruction to obstructive sleep apnea and should not be overlooked.

Management of Nasal Airway requires the following; Submucous resection of deflected and buckled portions of the nasal septum, reduction of the hypertrophic inferior turbinates, maxillary transverse expansion, nasal aperture widening, and recontouring of the nasal floor. In addition to details about management of the nasal airway and discussion of literature, clinical studies of the author regarding the topic will be presented, and prophylactic intranasal relieving surgery as an essential instrument for patency of nasal airway and minimizing

postoperative nasal dysfunction is emphasized.



Cihan Topan

I was graduated from Marmara University Faculty of Dentistry in 2008 and worked for a year as a dentist at a private clinic. I was accepted to the doctoral program at Erciyes University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery, in 2010, and I graduated in 2016. I worked as a specialist dentist at Kayseri Oral and Dental Health Hospital between 2016 and 2018. I have worked as an academic staff member at the Erciyes University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery, since 2019.

Patient Education Prior to Orthognatic Surgery

The importance of preoperative patient education has long been recognized and is now considered an essential component of patient preparation for surgery. The purpose of this education is to provide the patient with the knowledge and skills that they will need for the surgery. The healthcare team should have up-to-date information and conduct a planned study on this issue during pre-operative patient education. Orthognathic surgery is an elective operation, and the patient must receive precise and comprehensive information concerning surgical complications and outcomes. The importance of patient education in orthognathic surgery, as well as brief literature information about the contents of this education, will be emphasized in this presentation.



Berkay Tokuç

Berkay TOKUÇ graduated from Marmara University, Faculty of Dentistry in 2014. He started his postgraduate education in Kocaeli University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery in 2014 and received his MSc degree in 2019. Between 2019-2020, he served in private clinics in İstanbul. Since 2020, he has been continuing his academic career as Asst. Prof. at Kocaeli University. Since 2022, Berkay TOKUÇ has also been working as the Vice Dean of Kocaeli University, Faculty of Dentistry. His research interests include dental implantology, orthognathic surgery, maxillofacial trauma, maxillofacial abnormalities, and oral patholog

Graftless Solution of Extreme Atrophic Maxilla: Zygomatic Implants-Current Concepts

The replacement of missing teeth using dental implant insertion is currently considered as an evidence-based treatment option to improve patients' quality of life, mainly due to the high predictability showed in the last years. However, implant-supported prosthetic rehabilitation of severely resorbed atrophic maxilla constitutes a challenging therapeutic problem. Despite several alveolar bone augmentation techniques that can lead to an optimal functional and esthetic rehabilitation has been proposed, such as sinus floor elevation, onlay block grafting, split crest technique, and distraction osteogenesis, these surgical techniques usually require prolonged and invasive surgeries and several months of waiting by patients before the prosthetic rehabilitation. Hence, zygomatic implant insertion, which avoids grafting procedures, offers an efficient therapeutic option with a good success rate and short treatment period to aforementioned procedures. Since the first description of zygomatic implants by Branemark, the surgical technique has undergone continuous development and many variations are described with respect to the incision, implant position related to maxillary sinus or maxillary bone, the number of required zygomatic or conventional implants, and the time of prosthetic loading. In this presentation, current concepts of zygomatic implants will be discussed with cases and the current literature data.



Gözde Işık

Gözde Işık has graduated from Marmara University, School of Dentistry, İstanbul, Turkey in 2013. She completed her training in 2018 at Ege University, School of Dentistry on Oral and Maxillofacial Surgery. Between 2019 and 2022, she served as a Lecturer at Ege University, School of Dentistry, Department of Oral and Maxillofacial Surgery, İzmir, Turkey. In 2023, she was entitled as an Assistant Professor, and she still continues to work in the same department. She has started to PhD education on stem cell at Ege University, Institute of Health Sciences, in 2022. She is member of the European Association for Osseointegration and the Oral and Maxillofacial Surgery Society. Her special interests are advanced implant surgery, bone augmentation techniques and platelet concentrations.

Use of Autogenous Tooth Graft as an Alternative Augmentation Material

Missing teeth, periodontal diseases or physical trauma can lead to alveolar bone deficiency. Different types of augmentation materials are used in clinical practice to minimize resorption and to provide sufficient bone volume for implant insertion. These augmentation materials are classified as autograft, allograft, xenograft and alloplast. The idea of using extracted teeth is considered a recent available alternative of these materials. Autogenous tooth graft consists of dentin particles which comprises type I collagen and also it has organic and inorganic components of alveolar bone. Autogenous tooth graft provides the migration of preosteoblast and its cellular growth throughout the graft surface based on the osteoinductive and osteoconductive properties. Therefore, it is thought to be effective material to stimulate bone formation. In this presentation, the results of in vitro and in vivo analyses of autogenous tooth graft will be discussed by giving information about the preparation steps of this augmentation material.



Serhat Can

I was born in Konya in 1988. I completed my primary education at Diltaş College and high school in Meram Anatolian High School. In 2007, I started my undergraduate education at Marmara University Faculty of Dentistry. After completing his undergraduate education in 2014, he won the Specialization Examination in Dentistry (DUS) in 2015 and received specialization training in the Department of Oral and Maxillofacial Surgery at Marmara University Faculty of Dentistry. After graduating as a specialist dentist in 2020, he worked as an Oral and Maxillofacial Surgery specialist in the private sector for 1 year. He has been working at Bahçeşehir University Faculty of Dentistry since 2021.

Our Experience in Khoury Technique: Unspoken Tips and Tricks

The aim of this presentation is to explain the important unspoken tips and tricks of using the split bone block (SBB) technique for horizontal bone augmentation. Horizontal bone deficiencies are very common in oral surgery and implantology. Many bone augmentation techniques are available to overcome this clinical situation. Among these techniques, autogenous bone augmentation techniques are still considered the gold standard. Among autogenous bone augmentation techniques, split bone augmentation technique(SSB-Khoury) is the most used technique in recent years due to its predictable and satisfactory results. This technique requires precision and includes many details. In this presentation, I will talk about the details and tips in this technique that have not been mentioned in scientific publications and presentations before. The clinical results of my 10 cases in which I had horizontal bone augmentation with the split bone augmentation technique(SSB-Khoury) in the maxilla and mandible and the results were followed for more than 1 year will be shared.



Emine Fulya Akkoyun

Emine Fulya Akkoyun graduated from Erciyes University Faculty of Dentistry, Kayseri, Turkey, in 2010. She stayed at the same university for her postgraduate degree in Oral and Maxillofacial Surgery and earned her PhD and specialty degrees in 2017. She worked as a specialist at Oral and Dental Health Centers affiliated with the Ministry of Health in Sanliurfa and Istanbul for three years. She was appointed as an Assistant Professor at Beykent University, Istanbul, in 2020. After a year, she left and started to work as a clinical academic at Bezmialem Vakif University. She has been working at this institution as an Assistant Professor since January, 2023. Her research interests include orthognathic surgery, oral and maxillofacial pathology, and dental implantology.

"Patient – Specific" Concept in Oral and Maxillofacial Surgery

The application of digital technology in oral and maxillofacial surgery has become increasingly widespread with the advancements in computer-aided design/computer-aided manufacturing (CAD/CAM) techniques. Many clinical studies have reported the accuracy of these techniques. CAD/CAM provides 3D visualization, simulation, prediction, and modeling. Besides, this technology helps surgeons perform patient-specific surgery and transfer the pre-surgical virtual planning to the operating room by using custom-made surgical splints, cutting guides, positioning the custom osteosynthesis or reconstruction plates' screw holes or adapting distractors, taking into account the movements of the bone fragments. Patient-specific implants for reconstructing extensive defects due to benign or malign pathologies or trauma are manufactured to each patient's anatomical characteristics. Furthermore, some clinical studies have demonstrated the success of custom-made root analog dental implants. This presentation briefly summarizes the current literature on the use of patient-specific surgical splints, cutting and repositioning guides, and custom-made implants to treat dentofacial deformities and shows several cases.



Mobin Nesiri

Dr Nesiri has been working as assistant professor at Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Biruni University since 2017. After initially graduating in dentistry from İstanbul University in 2009, he completed residency program in Oral and Maxillofacial Surgery from Hacettepe University in 2017. Dr Nesiri's areas of clinical and research interest are dental implantology, TMJ, oral diseases, surgical anatomy, oral pathology, orthognatic surgery, oral pharmacology, maxillofacial abnormalities, craniomandibular disorders and maxillofacial trauma. He has several publications in the peer reviewed literature.

Subperiosteal Implants: Past, Present and Future

Edentulism is a high prevalence disease in elderly patients that has a significant impact on the health status, causing functional and social limitations. In severely atrophied jaws that cannot be treated with conventional dental implants, subperiosteal implants have been suggested as a treatment alternative in cases where methods such as bone graft augmentations, all-on-4 concept, zygoma implants and their combinations are limited due to various complications and prolonging the treatment process. In this presentation, the use and success rates of subperiosteal implants from past to present, possible complications and management methods, and their future role in dental implantology will be discussed in the light of the literature.



Gökhan Gürses

Gökhan Gürses was born in 1988. He graduated from Kırıkkale University, Faculty of Dentistry, in 2013. He completed his specialty training at Necmettin Erbakan University, Faculty of Dentistry, Oral and Maxillofacial Surgery Department in 2019. After that, he worked as a Specialist at Afyonkarahisar Public Oral and Dental Health Center. Since 2020, he has been working as an Assistant Professor at Selcuk University Faculty of Dentistry, Department of Maxillofacial Surgery. Gökhan Gürses is a member of AÇBID since 2015.

Current Treatment and Management Strategies for MRONJ

Antiresorptive and antiangiogenetic medications can cause MRONJ. Among the drugs that cause MRONJ, the most popular are bisphosphonate and denosumab. MRONJ management is a controversial topic due to its multifactorial nature. There is no definitive and single treatment method. Researchers have tried different methods or products to prevent, manage or treat. These are in a wide range from conservative to radical. Also, adjuvant therapies are defined in the literature. MRONJ is an exhausting and challenging chronic condition for the physician and the patient. Both lead and adjuvant therapies are directed toward the pathophysiology of MRONJ, as in almost all diseases. Inhibition of osteoclasts, inflammation, and infection, inhibition of angiogenesis, immune dysfunction, and genetics are potential pathophysiological hypotheses. In addition to these, systemic and local risk factors act as predisposing factors. In this presentation, I will mention the short history of MRONJ, which has been going on from the past to the present, its definition, staging, pathophysiology, and the current treatment and prevention methods widely used.





Zeynep Afra Akbıyık Az

Zeynep Afra Akbıyık Az was born in Istanbul in 1991. She obtained her secondary education from Istanbul (Male) High School in 2009 and subsequently pursued a master's degree in dentistry at Istanbul University, which she completed in 2014. Following a two-year stint as an independent dentist, she commenced her doctoral studies in Oral Medicine at the Department of Oral and Maxillofacial Surgery in the Faculty of Dentistry at Istanbul University in 2016. She successfully completed her doctoral degree in 2022. Currently, Zeynep Afra Akbıyık Az is employed as a Research Assistant Doctor in the Department of Oral and Maxillofacial Surgery at the Faculty of Dentistry at Istanbul University, where she is actively engaged in both academic and clinical studies. In addition to her academic pursuits, she is an esteemed member of the Osseointegration Academy Association (Osseder) and the European Association for Osseointegration (EAO). Her areas of expertise encompass advanced implant surgery, bone augmentation techniques, and oral medicine.

Are Dental Implant Applications Contraindicated in Patients with Congenital Bleeding Disorders?

Congenital bleeding disorders (CCD) usually develop due to decreased production or defective production of one of the coagulation proteins. Deficiencies or dysfunctions of the factors involved in the coagulation system cause bleeding tendency. Hemophilia is a recessive CCD that is carried by women and affects men. It is caused by mutations on the X chromosome and is characterized by decreased or absent functional activity of factor VIII in Hemophilia A or factor IX in Hemophilia B. von Willebrand disease (vWD) is an autosomal-recessive bleeding diathesis characterized by a prolonged bleeding time caused by a deficiency or functional impairment of von Willebrand factor (vWF). vWD, with an estimated prevalence of 1-2%, is the most common congenital bleeding disorder. Hemophilia A affects one in 5,000 male births, while hemophilia B affects one in 30,000.

CCD may increase the risk of bleeding during implant surgery. Although bleeding is a common contraindication in dental implant surgery, there is no evidence in the literature that CCD are a contraindication to dental implant treatment. Due to the lack of information regarding hemostasis, traditional literature advises against treating hemophiliacs with dental implants. However, there are case reports in the literature reporting that hemophilic were successfully treated with dental implants. There is currently no approved reliable protocol for the application of dental implants in CCD patients, but there are several guidelines regarding the planning of surgery. Communication with the patient's hematologist is essential for successful treatment. The patient's hematologist should be consulted beforehand to reduce the possibility of bleeding complications. The size of the surgical procedure to be performed should be specified, as well as the replacement of dose factors and drug regulation. Following a successful multidisciplinary approach and under the appropriate conditions, patients with CCD can receive dental implants under the same conditions as healthy individuals.



Nelli Yıldırımyan

Nelli Yildirimyan is an Assistant Professor of the Oral and Maxillofacial Surgery department at Istanbul Medipol University, School of Dentistry since 2021. She graduated from Marmara University School of Dentistry with honors in 2015. She pursued her residency in Oral and Maxillofacial Surgery at Akdeniz University between 2016-2020. She received her title as an oral and maxillofacial surgery specialist after defending her thesis on "P16 and CAPRIN-1 expressions in odontogenic keratocysts and dentigerous cysts". Her main clinical interests are maxillofacial pathologies, traumatology and dentoalveolar surgery. She authored several research articles published by internationally indexed journals and has four chapters in internationally and nationally published reference books.

"The infamous" Unicystic Ameloblastoma – How to manage?

Ameloblastoma is the second most prevalent odontogenic tumor of the jaws following odontoma. It is a slow-growing, benign tumor that contributes to about 1% of all jaw tumors and 9-14% of all odontogenic tumors of epithelial origin. Ameloblastoma has an incidence rate of 0.92 per million-person-years. According to the World Health Organization (WHO) Classification for Odontogenic Lesions, which have been recently updated for the fifth time, ameloblastoma subtypes are determined as unicystic, extraosseous or peripheral, conventional, adenoid and metastasizing.

Unicystic ameloblastoma (UA) refers to cystic lesions that clinically and radiologically show characteristics of an odontogenic cyst but histologically shows an ameloblastomatous epithelium lining part of the cyst cavity. UA usually presents at the second decade of life and is more prone to affect the male population. The posterior body of the mandible and the ramus are the most affected parts of the jaws. Histologically UA has three subtypes which are luminal, intraluminal, and mural.

There is a no consensus on the management of not only UA but also ameloblastoma in general. Luminal and intraluminal subtypes of UA are advised to be treated conservatively but there is a major controversy on the management of the mural type due to the ongoing debate of whether the mural type is in fact a subtype of conventional ameloblastoma or not. This controversy has still not been elucidated even on the 5th edition of WHO Classification and this sub-entity remained to stay under UA. The choice of treatment depends on the type of the UA and its clinical presentation. Management options for UA vary from curettage, enucleation, marsupialization with or without enucleation to resection with a 1-cm margin of healthy-looking bone. Cryotherapy, thermal or chemical cauterization, radiotherapy, and chemotherapy have also been suggested as adjunct treatments.

This speech aims to review unicystic ameloblastoma from diagnosis to treatment in light with case presentations and the recent literature.



Sümer Münevveroğlu

Sümer Münevveroğlu completed his undergraduate degree in dentistry from Istanbul Medipol University in 2016, and then went on to pursue a PhD in maxillofacial surgery at the same institution. He successfully completed his PhD study in 2021 and was subsequently appointed as an assistant professor in the department of oral and maxillofacial surgery at Istanbul Medipol University. His research interests include facial trauma, orthognathic surgery and dental implants.

Determining and Transferring the Natural Head Position for Virtual Planning

The Natural Head Position (NHP) is critical for successful virtual planning in maxillofacial surgery. Virtual planning offers various benefits, such as increased efficiency, accuracy, and predictability, and helps surgeons visualize the desired outcome before the actual surgery, improving communication with the patient and reducing operative time. Moreover, virtual planning focuses on soft tissue more than conventional planning, making the head position crucial. This presentation discusses various methods for determining and transferring the NHP in virtual planning, along with their clinical implications.

Several methods, such as the use of an inclinometer, the "self-balance" technique with or without a mirror, corrected head position, and looking at the horizon have been developed to determine the NHP. Once the NHP is determined, it should be accurately transferred into the virtual environment. In the literature various methods for accurate transfer, such as stereophotogrammetry, manual orientation according to NHP photographs, self-leveling laser and skin markers, and laser scanners were described.

This presentation highlights the importance of accurate determination and transfer of the Natural Head Position in virtual planning for maxillofacial surgery. It explores the clinical implications and significance of various available methods for determining and transferring NHP into the virtual environment. Overall, NHP determination and transfer are essential for successful surgical outcomes and improved patient satisfaction.



Yusuf Nuri Kaba

Dr. Yusuf N. Kaba is Lecturer in the Department of Oral & Maxillofacial Surgery at the University of Erciyes, Kayseri, Turkey. Dr. Kaba's clinical practice focused on skeletal correction of dentofacial deformities. Dr. Kaba earned his DDS degree from the University of Kocaeli, Faculty of Dentistry, Kocaeli, Turkey. He completed his specialty degree in Oral and Maxillofacial Surgery from Erciyes University. Dr. Kaba is a member of national association of maxillofacial surgery.

Factors Effecting the Lingual Split Pattern on Sagittal Split Ramus Osteotomy

Sagittal split ramus osteotomy (SSRO) is the most used technique for the correction of dentofacial deformities. SSRO was first introduced by Schuchardt in 1942, it was popularized by Trauner and Obwegeser in 1957. Since then, many modifications have been made. Each modification has its own characteristics and purpose to ensure the correct separation of segments. SSRO is a reliable technique but not all stages of the operation can be controlled. Studies on lingual fracture patterns have reported that the lingual fracture line is highly variable and unwanted fractures occur in 0-15% of split. Factors affecting the lingual fracture pattern can be grouped under three headings: anatomical features of the mandible, osteotomy stage related factors and split stage related factors. Morphological features and density of the mandible, especially on the osteotomy lines, have been associated with the lingual fracture pattern. In addition, atypical mandibular anatomy can make difficult to complete application of osteotomy technique. The osteotomy technique and the exact application of the osteotomy during surgery have a primary impact on the lingual fracture pattern. In addition, the dominant hand and experience of the surgeon performing the split stage, the force applied during the separation and the direction of separation, the surgical instruments which used splitting influence the lingual split pattern. Numerous studies have investigated the relationship between mandible anatomy and lingual fracture pattern. The limitation of this studies anatomical features of mandible was evaluated, but no evaluation was made regarding the osteotomy technique. The aim of this presentation is to evaluate the anatomical features of the mandible and the effects of osteotomy technique-related factors on the lingual fracture pattern.



Seçil Çubuk

I graduated with a Bachelor of Dental Science from the Marmara University in 2010. I gained my PhD degree in Oral and Maxillofacial Surgery at Başkent University in 2014. I worked as an observing visitor surgeon in AZ Sint-Jan in Brugge in 2016 and Ludwig-Maximilian University in 2019. I am currently working as a faculty at the Department of Oral and Maxillofacial Surgery in Başkent University. My surgical and scientifical interests include dental implantology, correction of dentofacial deformity and TMJ surgery. I authored many scientific publications and two book chapters.

Stability of Different Ostheosynthesis Techniques in Le Fort I Osteotomy

Immobilization of the jaw by rigid internal fixation during orthognathic surgery is required to prevent impaired bone healing and postoperative relapse. Maxillary mobility due to nonunion, also called as floating maxilla, is possibly caused by inadequate stabilization. Prebent miniplates and conventional miniplates are mostly utilized to stabilize the maxilla during surgery. By improving the 3D computerized planning and manufacturing systems, patient specific implants also gained popularity in the field of maxillofacial surgery. Based on the scientific data available in the current literature, I am going to focus the accuracy and success of different osseosynthesis devices using for fixation of Le Fort 1 osteotomies.



Canseda Avağ

Dr Avağ is currently working as assistant professor at Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Biruni University in İstanbul, Turkey. After initially graduating in dentistry from Hacettepe University in 2012, she completed residency program in Oral and Maxillofacial Surgery from Hacettepe University in 2017. Dr Kazan's areas of clinical and research interest are dental implantology, TMJ, oral diseases, surgical anatomy, oral pathology, orthognatic surgery, oral pharmacology, maxillofacial abnormalities, craniomandibular disorders and maxillofacial trauma. She has several publications in the peer reviewed literature.

The Concept of Preemptive Analgesia in Oral and Maxillofacial Surgery

Surgical removal of impacted teeth is routinely performed in the field of oral and maxillofacial surgery. As a result of this procedure, postoperative complications associated with inflammation may occur due to the injury to surrounding tissues. Although these complications are transient, they can affect a patient's quality of life by causing discomfort and morbidity.

It is of great interest to minimize these complications to improve patient comfort and satisfaction and reduce the need for additional follow-up visits. Precise surgical techniques and perioperative strategies can minimize the frequency and severity of these complications









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