



ACBİD

17. ULUSLARARASI KONGRESİ
17th INTERNATIONAL CONGRESS

10-14 Mayıs / May 2024

Susesi Hotel & Convention Center
Belek ANTALYA

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**ABSTRACT
BOOK**

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**The above names are listed alphabetically by surname.*

**ORAL
PRESENTATIONS**

OP-001

Is Buccal Fat Pad an Effective Treatment Method for Oroantral Defect Management: A Case Series

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Objective: Oroantral defects are one of the clinical situations frequently encountered in oral and maxillofacial surgery clinics. There are many treatment options such as soft tissue flaps and hard tissue grafts. In this study, buccal fat pad (BFP) treatment was investigated for management of oroantral defects.

Materials-Methods: In this study, patients referred to our clinic between 2017 and 2023 with an oroantral defect of more than 5 mm dimension were examined. The size of the defects was calculated using CBCT or Castroviejo circles and the treatment approach was determined. The gender, age and medical history of the patients were recorded. Patients were controlled on the 3rd and 7th day after the surgery. Postoperative clinical findings such as edema, trismus, pain scores, analgesic requirements, soft and hard tissue healing and the presence of secondary oroantral defects were recorded.

Results: A total of 10 patients were included in this study and recurrence was observed at only one patient. The second surgery was planned, and symphysis bone graft was applied to the region with a screw. The soft tissue dehiscence was observed in the region, nevertheless, graft wasn't removed from the area and used as air plug during the postoperative period. The soft tissue healing was detected under the symphysis graft and OAD was seen closed.

Conclusion: BFP is successful for the treatment method for management of oroantral defects, as shown in the presented study. However, further clinical studies with larger sample sizes are needed for the management of oroantral defects.

Keywords: Oroantral defects, buccal fat pad

OP-002 Pleomorphic Adenoma of the Palate: Our Clinical Experiences

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Objective: This study aims to share our clinical experiences with patients diagnosed with palatal pleomorphic adenoma. Additionally, it seeks to convey clinical insights regarding the diagnosis, treatment, and follow-up of palatal pleomorphic adenoma, as well as provide information on the tumor's epidemiology, malignancy risk, prognosis, and treatment options.

Case: The presented case series includes three cases diagnosed with palatal pleomorphic adenoma. Among these cases, recurrence was observed in one instance, accompanied by complications such as nasal floor exposure following the extensive surgery. However, no recurrence or complications were noted in the remaining cases following excision. All three cases were treated under general anesthesia.

Conclusion: In conclusion, palatal pleomorphic adenoma poses a high risk of recurrence and malignant transformation. Wide excision is preferred in treatment, and long-term follow-up is essential. These findings may guide clinical practice in the management of palatal pleomorphic adenoma.

Keywords: pathology, pleomorphic adenoma, salivary glands

OP-003

Retrospective Evaluation of Orthognathic Patients in Terms of Demographics, Expectations, And Satisfaction

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Objective: This study aims to assess the factors influencing expectations and satisfaction in patients undergoing orthognathic surgery.

Materials-Methods: In our study, 132 individuals who underwent orthognathic surgery were included. Patient expectations and satisfaction were retrospectively evaluated using data obtained from video recordings taken before and after treatment.

Results: The examined patients were aged between 16 and 39, with 75% being under 25. Orthognathic surgery was more frequently performed on skeletal Class 3 patients. The rate of patients with surgical severity above 10 mm was 43.2%. In the investigation of patient expectations, the predominance of aesthetic expectations was found to be 62.1%. The prioritization of aesthetic expectations in females and functional expectations in males was found to be more significant ($p < 0.001$). The marital status of being single was associated with more significant aesthetic expectations as well, while those who were married prioritized functional expectations ($p = 0.028$). In addition, patients experiencing complications during surgery had significantly lower satisfaction ($p = 0.012$). The preference for non-rigid fixation type was significant in cases with surgical severity less than 10mm ($p = 0.020$). In comparison, hybrid fixation type preference was more significant in cases with severity greater than 10mm ($p = 0.020$). The impact of other examined parameters on expectations and satisfaction was not statistically significant.

Conclusion: The results with statistically significant relations to aesthetic expectations, functions, marital status, complication rates, and fixation types in patients; surgeons should be careful about the surgical planning and also carefully consenting of their patients.

Keywords: expectations, orthognathic surgery, satisfaction

OP-004

Surgical Rehabilitation of the Post-Operative Defect in the Mandible After Ameloblastoma Excision: A Case Report

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Objective: Ameloblastoma is a benign odontogenic tumour that usually affects the jaw bones. It is a locally aggressive epithelial tumour, usually asymptomatic and slow growing. Patients generally present to the dentist with painless edema and facial asymmetry. The aim of this case report is to determine the methods of surgical rehabilitation of the postoperative defect in the mandible of a patient who underwent surgery for ameloblastoma in an foreign centre.

Case: Our 48-year-old patient was referred to our faculty after a biopsy performed in an external center in 2021. The biopsy result was ameloblastoma. A panoramic X-ray revealed a multilocular radiolucent lesion covering the apex of the left mandibular teeth. We were decided to operate our patient under general anesthesia. Our patient was operated in an external center when her complaints increased and reapplied to our faculty in 2022 and requested rehabilitation of the defective area formed after ameloblastoma excision. iliac graft surgery was planned under general anesthesia for rehabilitation. Since the level of rehabilitation after iliac graft surgery was not sufficient, khoury surgery was planned as a second surgery. free gingival graft surgery was performed before khoury surgery. khoury surgery was performed 6 months after iliac graft surgery. the patient is waiting for bone healing before implant operation.

Conclusion: Ameloblastoma is a common odontogenic tumor, its treatment remains controversial. Ameloblastoma shows aggressive behavior, they can cause large defects in the jaw bones. The primary goals of mandibular reconstruction defects resulting from ameloblastoma are restoration of function and an acceptable cosmetic result.

Keywords: ameloblastoma, Iliac Crest, odontogenic cyst

OP-005

Research of the Effect of Systemic SSRI Use on Bone Healing Markers

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Objective: The negative effect of selective serotonin reuptake inhibitors on bone healing is supported by current studies. Dental implant osseointegration is observed after an approximately eight-week bone resorption process. The effect of SSRI use on dental implant osseointegration is still under investigation. The effect of SSRI use on dental implant osseointegration in rabbit model is investigated in our study.

Materials-Methods: In our study, 2 group models were created, and 16 dental implants were applied to both tibias of 8 New Zeland rabbits. In the Group 1 model, SSRI was administered orally during the eight-week recovery period, while the Group 2 model was followed as the control group.

Results: As a result of our study, biochemical analysis of blood samples taken from the subjects and bone formation and bone resorption markers (Ca, P, ALP, AST, ALT) were examined, and no statistically significant results were found.

Conclusion: In our study, no difference was observed between the experimental and control groups.

Keywords: SSRI; Dental Implant; Bone; Osseintegration

OP-006 Retrospective Analysis of Factors Associated with Implant Failure

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Objective: Implant failure may occur before or after loading of the prosthesis. Patients should be informed about the risk of failure. Investigating the reasons for failure is essential to increase the success rate of implant treatment. The aim of this study is to retrospectively investigate the factors affecting the failure in implant treatment.

Materials-Methods: Our study included patients who applied for implant treatment at the Oral and Maxillofacial Surgery Clinic, Faculty of Dentistry, Ordu University, between 01/01/2018 and 01/06/2023. The study examined various factors that may influence the success of implant treatment, including gender, systemic diseases, periodontal diseases, smoking, bone characteristics, implant diameter and length, and implant design.

Results: Totally 956 dental implants were placed in 3249 patients. Of these, 69 implants failed in 51 patients, giving a failure rate of 2.12%. Patients with implant failure included 23 females and 28 males with a mean age of 53.00 ± 10.88 years. Of the failed implants, 50.7% had a diameter of less than 4 mm and 20.3% had a length of less than 10 mm. None of the failed implants used grafts and did not have an aggressive implant. When the classification of failed implants was examined according to the bone type in which they were placed, 66.7% were of D2 bone type.

Conclusion: The process of implant treatment is influenced by many factors. The literature has identified several factors associated with failure. Further research is needed to fully investigate this issue.

Keywords: Dental Implant, Osseointegration, Implant Failure

OP-007

Medication-Related Osteonecrosis of the Jaw Around Osteointegrated Dental Implants: A Case Report

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University, Nicosia, Cyprus.*

Objective: Dentoalveolar surgery, which involves tooth extractions and placement of dental implants, is considered the main risk factor for the development of drug-induced osteonecrosis of the jaw (MRONJ).

Case: An 88-year-old female patient applied to the Oral and Maxillofacial Department due to a mobility problem in her tooth. She had no spontaneous pain, it only occurred during function. After radiographic and clinical examination, It was determined that the crown of the implant in area 37 was mobile and there was a radiolucent area around implants. She stated that she started using bisphosphonates for 25 years due to osteoporosis and had implant surgery 15 years ago. The patient was prescribed amoxicillin + clavulanic acid twice a day, 3 days before the surgery. The implant was then removed and osteonecrotic bone was observed along with the implant (osteointegrated implant). The surgical area was thoroughly curetted and washed with physiological saline and closed primarily. Postoperative recovery was uneventful after 2 weeks of follow-up.

Conclusion: The previous researches confirm that not only surgical insertion of dental implants is a potential risk factor for the development of osteonecrosis but also the presence of the implant in the bone may be associated with this disease. Therefore, it is necessary to inform of the increased risk for MRONJ also the patients who have already osteointegrated implants.

Keywords: Implant, MRONJ, Osteoporosis

OP-008

Investigation Of The Stresses Caused By Zygomatic, Dental And Pterygoid Implants Applied With Different Plans In Bilateral Atrophic Maxillary Rehabilitation By Finite Element Analysis

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Objective: The aim of this study was to examine the stresses that occur in the implants under the chewing forces of zygomatic, dental and pterygoid implants in the hyperatrophic maxilla modeled with computer aid by finite element analysis method and to evaluate the obtained data and to choose the most accurate treatment planning.

Materials-Methods: Within the scope of the research, four different plans were made. In the first group, zygomatic implants (ZI) on both jaws, dental implants (DI) on the 1st premolar region. In the second group, ZI on both jaws, DI on the lateral and 1st premolar regions. In the third group, pterygoid implants (PI) on both jaws, DI on the 1st premolar region. In the fourth group, PI on both jaws, DI on the lateral and 1st premolar regions. At the level of teeth 2-4-6-7, a vertical force of 150 N and an oblique force of 100 N were applied.

Results: According to the results of our study, it was observed that the accumulated stress on implants under vertical forces was minimum in group 4, whereas under oblique forces, the stress was minimum in group 2.

Conclusion: The results showed higher Von Mises stress in implant neck regions for pterygoid, zygomatic, and standard dental implants. Stress decreased with increased implant numbers across all groups.

Keywords: Atrophic maxilla, pterygoid implant, finite element stress analysis

OP-009 Craniofacial Bone Grafting

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Objective: Craniofacial bone grafting plays an important role in the reconstruction of the craniofacial skeleton. Most of the craniofacial surgeons accepted that bony defects of the face must be reconstructed with bone, and soft tissue defects must be reconstructed with soft tissues. Several studies have described the cranial bone grafting procedure that is preferred by most craniofacial surgeons worldwide. In the past and currently, alloplastic and other autogenous materials have been used to reconstruct the craniofacial skeleton. However, alloplastic materials have been abandoned as they are associated with a high risk of complications such as migration, infection, and underlying bone resorption.

Materials-Methods: If vascularized free bone flaps and nonvascularized iliac bone grafts for mandibular reconstruction are eliminated, cranial bone grafts are the gold standard for use in the craniofacial skeleton. Because cranial bone grafts are composed of membranous bone, it is felt that they retain their bulk better than other types of bone grafts do, especially if they are rigidly fixed.

Results: Post-traumatic defects such as orbital floor fractures, postresection defects due to bone tumors, congenital bone defects, and esthetic reasons are some of the indications for the use of cranial bone grafts.

Conclusion: In this presentation, craniofacial reconstruction from mandible to cranium with bone grafts will be presented according to the authors extensive experience over hundreds of patients. The author has published nine papers and a book chapter about this topic in the World literature.

Keywords: Bone Grafting, Craniofacial Surgery

OP-010

The Effect of Ambient Temperature and The Time Passed After Centrifugation at Platelet Rich Fibrin: A Pilot Study

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Objective: Platelet Rich Fibrin (PRF) is a commonly used autologous material in regenerative dentistry. Its usage in dentistry is common in intraosseous defect repair, horizontal/vertical bone augmentation and sinus lifting procedures. The aim of this study was to evaluate the effect of post-centrifugation time and ambient temperatures on the physical properties of PRF and by this method to provide guidance for its optimal preparation clinically.

Materials-Methods: A total of 38 volunteers, 29 women and 9 men, participated in the study. Three 10ml tubes of venous blood were collected from each volunteer. The blood was centrifuged at 3000 rpm for 10 min (400 g). After centrifugation, PRF weight, volume, membrane surface area and membrane volume were measured. One of the tubes was measured immediately after centrifugation, while the other tubes were measured after being kept at room temperature for 3 minutes and at +4 degrees for 3 minutes at cold temperatures.

Results: A significant difference was observed in PRF weight and volume in women in all three environments. A significant difference was observed in surface area and membrane volume in women only in the group kept at room temperature for 3 min. However, no significant difference was observed in PRF weight, volume, membrane surface area and membrane volume between the groups.

Conclusion: Due to the advantages of PRF, it is planned to provide maximum benefit with our optimization studies. But new studies with higher sample numbers can be needed to perform for determining the optimization of PRF.

Keywords: Ambient temperature, PRF, Time

OP-011

A Comparative Analysis on the Precision of 2d Cephalograms, Cone Beam Computed Tomography And 3d Printed Solid Models in Evaluating the Stability of Genioplasty

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Objective: Genioplasty is among the most common procedures performed for correction of chin position either alone or in conjunction with orthognathic surgery, however, long-term stability of genioplasty has always been a subject of debate. This study aimed to evaluate the correlations between measurements made on 2D cephalometric radiography, cone-beam computed tomography (CBCT) and 3D printed solid models for the assessment of the stability of different genioplasty procedures.

Materials-Methods: A retrospective analysis was performed using radiological data of 12 patients who underwent genioplasty procedure. Comparisons were performed by measurement of certain anatomical landmarks on cephalometric and CBCT images which were taken at post-operative 1-week and 6-month.

Results: A significant difference were observed between the measurements on 2D cephalometric radiographs and 3D measurements (CBCT images and 3D printed models) on both horizontal and vertical planes. However, no significant difference was observed between measurements on CBCT images and 3D printed models.

Conclusion: The results of this study revealed that 3D imaging may provide more precise data in assessing the outcomes of genioplasty procedure when compared with 2D cephalometric radiography.

Keywords: 2D cephalometric radiography, 3D printed solid models, genioplasty

OP-012

Bibliometric Analysis of Articles on the Use of Artificial Intelligence in Dental Corticotomy

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Objective: This study was conducted to determine the trend of research in the field of corticotomy. In the research, artificial intelligence studies on corticotomy published in the Web of Science database on February 22nd 2024 were examined.

Materials-Methods: 500 studies titled 'corticotomy' and 'artificial intelligence' conducted between 2020 and 2024 in the Web of Science database were evaluated with bibliometric analysis. Biblioshiny was used for bibliometric analysis.

Results and Discussion: As a result of the analysis, the most studies were conducted in the "Dentistry" category, 3796 authors worked on this subject, 1109 keywords were used, 16239 references were used, 250 sources were used, the annual growth rate was 16.33%, 326 of the studies were articles and 3 of them were articles. It has been observed that the article is in early access status. It was concluded that most studies were carried out 2023. It was observed that most articles were published in the journal Scientific Reports.

Conclusion: Bibliometric research both reveals the current scientific status of the topics discussed and gives insight into their development in the process, therefore they are valuable research. The findings serve as a guide for future research in the field of artificial intelligence use in corticotomy.

Keywords: Bibliometric analysis, Corticotomy, Web of science database

OP-013

Comparison of Chronic Osteomyelitis versus Medicine Related Osteonecrosis of The Jaw

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Objective: The aim of this study was to investigate the recurrence rate, clinical, microbiologic, and radiologic characteristics of stage 2 and 3 suppurative chronic osteomyelitis (SCO) and medicine-related osteonecrosis of the jaw (MRONJ).

Materials-Methods: Patients referred to our clinic for SCO and stage 2 and 3 MRONJ between 2020-2023 were included in this study. Microorganisms were isolated by the bone samples that were obtained from adjacent tissues under the necrotic bone during the surgery. The Composite Radiological Index (CRI) was evaluated by using the radiologic data. Patients' age, gender, causes of osteomyelitis, location of osteomyelitis, intraoperative and postoperative complications were recorded.

Results: Twenty patients were enrolled in this study and divided into 2 groups: MRONJ (13 patients) and SCO (7 patients). The mean age was 59.65 years (range 39-80 years). The mean follow-up time was 9.4 months (range, 2-24 months). The median CRI index was 6.45 (range, 2-8) Colonies of actinomyces species were observed in %50 of all cases. Recurrence was observed in 3 cases. While the healing time was prolonged in 6 cases, healing was incomplete in only one patient. There was no significant difference between the groups in terms of Actinomyces proliferation, CRI index or recurrence rate ($p>0.05$).

Conclusion: Although MRONJ could be more difficultly treated than SCO because of the chemical treatment and the systemic conditions of the patients are more complicated than the SCO patients; the treatment of MRONJ with specific antimicrobial therapy and CRI evaluation could be as manageable as the treatment of SCO.

Keywords: suppurative chronic osteomyelitis, MRONJ

OP-014

Prevalence of “Distressed” Personality in Patients with Dentofacial Deformities and Evolution of Type D Personality Traits After Orthognathic Surgery

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Objective: Orthodontic-surgical treatment, by altering the facial features of patients has the potential to influence the psychosocial factors of individuals and their engagement within society as it can significantly impact patients' self-esteem, body image and overall emotional well-being. The Type D Scale-14 was intentionally crafted to evaluate Negative Affectivity, Social Inhibition and Type D in a dependable, standardized manner. “Type D” refers to the tendency to experience negative emotions and to inhibit the expression of these emotions in social interactions. The aim of this study was to evaluate the psychosocial impact of patients with Type D personality disorder after orthognathic surgery.

Materials-Methods: Our study was conducted on patients who applied to Baskent University Department of Oral and Maxillofacial Surgery between November 2022-March 2024 to undergo orthognathic surgery procedure. Sociodemographic information questionnaire and D-type personality analysis test were filled out before the operation and at the 3rd postoperative month.

Results: When the patients with dentofacial deformity were compared with their preoperative status, it was found that the decrease in negative affectivity and social inhibition after orthognathic surgery were significant.

Conclusion: This is the first study in which the D14 personality scale, which plays an important role in the morbidity follow-up of cardiological patients, was used in orthognathic surgery patients. Although it is useful for observing the effect of character shaping on life-changing events such as surgery, the necessity of documenting the psychosocial status of patients before orthognathic surgery is among the results of our study.

Keywords: Type D personality, Orthognathic Surgery

OP-015

Extremely Rare Cases of Two Sisters with MPS Type VII Presenting Severe Jaw Cysts

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Objective: Mucopolysaccharidosis Type VII (MPS7, also called Sly syndrome) is an extremely rare autosomal recessive lysosomal storage disease, caused by mutations in the GUSB gene. Characteristic features of MPS VII include short stature, macrocephaly, coarse facies, hirsutism, hearing loss, cloudy cornea, short neck, valvular cardiac defects, hepatosplenomegaly, and dysostosis multiplex. Oral manifestations consist of wide root canal spaces, taurodontism, hyperplastic dental follicles, malposition of unerupted permanent molars, and failure of tooth eruption with malformed roots. The purpose of this presentation is to describe extremely rare cases of two sisters with MPS Type VII presenting severe jaw cysts.

Case: At first case, 17-year-old female patient reported that swelling in the left mandibular posterior region about 10 months ago and there has been swelling and pain from time to time until operation day. The patient has Mucopolysaccharidosis Type VII and receive Vestronidase Alfa every 15 days. The patient's orthopantomogram revealed severe cysts associated impacted teeth in mandible and maxilla. Patient was operated for enucleation of the cysts along with extraction of the involved teeth under general anesthesia. At second case, 28-year-old female patient reported that pain in the right maxillary posterior region for 2 months and also gingival recession in mandible. The patient has Mucopolysaccharidosis Type VII and receive Vestronidase Alfa and underwent right and left hip replacement surgery at the age of 12. The patient's orthopantomogram revealed severe cysts associated impacted teeth in mandible and maxilla and operation for enucleation of the cysts is planning under general anesthesia.

Conclusion: This is the first case report of two sisters with this extremely rare disease, in which the jaws were examined and cyst enucleation operations were performed.

Keywords: Mucopolysaccharidosis Type VII, Jaw Cyst, SLY Syndrome

OP-016

Different Concepts Based on Literature in Acquiring Facial Aesthetics in Hidden Orthognathic Patients

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Objective: Due to the large number of patients with slight skeletal disorders but without any functional limitations and the fact that these patients resort to achieving a more aesthetic appearance by permanent, simple and less risky methods, it was aimed to evaluate the feasibility and success of different facial shaping surgeries and their current conditions for these types of patients according to the literature.

Materials-Methods: This review was prepared by examining the literature and existing scientific studies, focusing on facial contour reshaping and facial fat pad repositioning surgeries. Surgical techniques, indications, advantages-disadvantages, results and patient satisfaction were evaluated.

Results: To alter the shape of the face, malarplasty (Intraoral bony shaving, Bicoronal I-shape osteotomy, Intraoral I- or L-shape osteotomy, Intraoral and preauricular I- or L-shape osteotomy, Intraoral and preauricular wedge-sections osteotomy, Percutaneous osteotomy, and Transposition of fat pads), mandibular angloplasty (Mandibular lateral outer cortex splitting ostectomy, Mandibular angle ostectomy, V-line ostectomy), as well as Genioplasty may be performed. However, each procedure has its own risks and complications. Therefore, patient selection, presurgical evaluation, and postsurgical follow-up are important. Successful outcomes in face contouring surgeries can be achieved with proper patient selection and appropriate surgical planning.

Conclusion: In achieving facial harmony, facial contour reshaping and fat pad repositioning surgeries have been found to be easier to perform, both in terms of patient satisfaction and because they are less invasive surgeries. These surgeries can also be designed customized for the patient and will be performed in combination.

Keywords: Fat pads, Orthognathic, Reshaping

OP-017

Coronoid Process Osteokondroma (Jacob's Disease): A Case Report

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Objective: Osteochondroma is a benign tumor originating from the cortex of the bone, covered with cartilage and usually seen in endochondral bones. Although it is commonly seen in the axial skeleton, it is rarely seen in the craniofacial region. It is most frequently observed in the condyle or coronoid process of the mandible. Oscar Jacob first described osteochondroma of the coronoid process in 1899, naming it 'Jacob's Disease' after himself. This case report presents a rare case of 'Jacob's Disease', as reported infrequently in the literature.

Case: A 33-year-old female patient with restricted mouth opening (5mm) and pain and clicking sound in the right joint region was admitted to İstanbul Kent University Oral and Maxillofacial Surgery Clinic. Examination via Computed Tomography (CT) revealed a mushroom-shaped enlargement of the coronoid process along with the formation of a pseudojoint medial to the zygomatic arch. The patient underwent coronoidectomy with intraoral approach under general anesthesia. The excised tissue was sent for histopathologic examination and diagnosed as osteochondroma of the coronoid process.

Conclusion: The etiology, pathogenesis, clinical features, diagnosis and treatment of the disease are discussed in this case report.

Keywords: coronoid process, jacob's disease, osteochondroma

OP-018

Unknown Clinical and Radiographic Features of Unilateral Condylar Hyperplasia

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Objective: Unilateral condylar hyperplasia is characterized by progressive growth of the condyle though the etiology is still unclear. Due to its subject-specific features, the treatment is controversial. This study aims to describe the unknown clinical and radiographic characteristics and demographic features of unilateral condylar hyperplasia to make referrals for better diagnosis and treatment.

Materials-Methods: Patients admitted to Baskent University Hospital Department of Oral and Maxillofacial Surgery between 2022 to 2024 with facial asymmetry were enrolled in this study. Inclusion criteria were the diagnosis of unilateral condylar hyperplasia supported by a positive bone scan above 10% of condylar uptake in SPECT/CT, the patient's history of progressive facial asymmetry, clinical and radiological symptoms. All the data of the patients included in this study were retrieved from the archive.

Results: 41 Patients were included in this study (10M; 31F). The mean age was 20.3 years (Max 42 and min 16). 12 of the patients had elongation, 14 had hyperplasia and 15 had a combination of both. 20 of the patients had condylar overgrowth on the left side, and 21 of the patients had on the right side. 3 Patients have temporomandibular joint symptoms, and orthodontic relapse occurred in 3 patients after orthodontic treatment due to unnoticed active growth of condyle during treatment.

Conclusion: Unilateral condylar hyperplasia is a condition that affects patients' comfort and self-confidence. Treatment planning must be specific to the patient's needs. This study provides new insights into clinical and radiographic features of the pathophysiology of unilateral condylar hyperplasia.

Keywords: Unilateral Condylar Hyperplasia, Facial asymmetry

OP-019

Evaluation of Temporomandibular Joint Disorders by Research Diagnostic Criteria (RDC/TMD) Biobehavioral (Axis II) Screening

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Objective: The aim of this study was to investigate psychometric analyzes of patients suffered with varied temporomandibular joint disorders using the Research Diagnostic Criteria Axis II form and compared with each other.

Materials-Methods: 274 patients were examined for this study and 4 patients were excluded various reasons, eventually 270 (212 female and 58 male) patients were evaluated. Then, the patients were examined clinically and radiologically, and the diagnosis was determined. The patients were evaluated in 4 groups: osteoarthritis (group 1), internal derangement (group 2), myofascial pain (group 3) and local myalgia (group 4) groups.

Results: The study was revealed that 16.3% of the patients had osteoarthritis (group 1), 31.5% of patients had internal derangement (group 2), 23.3% of patients had myofascial pain (group 3), 28.9% of patients had local myalgia (group 4). Degrees of depression and somatization, and chronic pain were investigated, it was revealed that myofascial pain group showed the highest values and, internal derangement group showed the lowest values. There was no difference between the local myalgia and osteoarthritis groups, and both showed higher values than internal derangement. It was revealed that myofascial pain group had higher rates use of antidepressant drugs compared to the other groups. There was no difference between the groups in terms of smoking.

Conclusion: According to the results, myofascial pain group were determined as the most depressive group and had the heaviest chronic pain. The internal derangement group was determined as the least depressive group and had the least chronic pain.

Keywords: Research diagnostic criteria, Temporomandibular disorders, Temporomandibular joint disorders

OP-020

Survey on Complications of Orthognathic Surgery Among Oral and Maxillofacial Surgeons

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Objective: This study aimed to investigate the frequent and rare complications experienced by oral and maxillofacial surgeons performing orthognathic surgery in the intraoperative and postoperative periods.

Material-Methods: Oral and maxillofacial surgeons who actively perform orthognathic surgery in Türkiye were included in the cross-sectional study prepared by creating survey. A survey of 19 questions was sent to participants via Google Forms. In the survey; There are questions to investigate the complications experienced during intraoperative and postoperative periods of orthognathic surgery. The data were analyzed statistically, the level of statistical significance was taken as $p < 0.05$.

Results: Sixty oral and maxillofacial surgeons who actively perform orthognathic surgery in Türkiye participated in the study. 65% of the participants are men and 35% are women. Those who perform orthognathic surgery are mostly between the ages of 31-40 (58.3%). 46.7% of the participants perform orthognathic surgery within 1-5 years. In the sagittal split ramus osteotomy and double jaw surgery, nerve damage complications occurred at the intraoperative and postoperative periods, respectively, at a rate of 82.5%, 76.8%. 50% of the participants experienced condylar resorption, which is rarely seen complication in the intraoperative or postoperative periods in orthognathic surgery. However, no significant relationship was noted between experience and rare complications ($p = 0.669$).

Conclusion: According to the results of our study, it appears that oral and maxillofacial surgeons in Türkiye experience similar complications in orthognathic surgery. Despite the wide range of serious complications reported, the number of these complications is quite low, making orthognathic surgery a safe procedure.

Keywords: complication, orthognathic surgery, skeletal deformity

OP-022

A Retrospective Comparison of 3 Different Surgical Techniques for Lateral Sinus Elevation

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Purpose: The purpose of this study is to investigate if the different surgical techniques affect the success and ease of this intervention considering bleeding, visibility of the operation site and operation time.

Materials-Methods: 494 consecutive patients included in this study. Patients are operated by 3 different techniques, randomly. The bleeding, visibility, ease of the procedure were evaluated on a 10-cm long visual analog scale (VAS) The operation time was recorded. Sinus membrane perforations and complications were recorded.

Results: Bleeding scores of the patients treated by SP was significantly the highest among the groups. Visibility of the operation site scores and ease of the operation scores in SP group was significantly was the lowest among the groups ($p=0.000$, $p<0.001$). When SP and PESL groups were compared, bleeding scores were lower, but visibility and ease of operation scores were higher in PESL group. PESL and ESCR group comparison revealed that difference between groups were almost statistically insignificant ($p=0.608$ and $p=0.202$, respectively) but ease of the operation scores were higher and the operation time was shorter in PESL group ($p=0.004$ and $p=0.001$, respectively).

Among SP and ESCR groups, overall scores but bleeding were higher in ESCR group. Operation time was shorter in SP group. All differences were statistically significant ($p<0.001$). The highest perforation rate occurred in SP group ($p=0.019$, $p<0.05$).

Conclusion: Arresting the bleeding enhances the visualization of the operation site, makes the procedure easier to handle and reduces the risk of membrane perforation or related complications.

Keywords: elevation, maxillary sinus, piezosurgery

OP-023

Extraoral and Intraoral Autogenous Grafts in the Augmentation of Atrophic Jaws

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Objective: Various techniques have been described in clinical practice for the rehabilitation of atrophic jaws with dental implants. In cases where anatomical limitations characterized by a resorption pattern are observed, treatment options include bone augmentations, guided bone regenerations, distraction osteogenesis, sinus lifting, use of inclined implants and mini implants. The purpose of hard tissue augmentations is to provide predictable bone support for ideal implant placement and to support soft tissue for optimal aesthetics. From past to present, many procedures and augmentation materials have been described for the rehabilitation of atrophic bone areas. Reconstruction of resorbed ridges using bone grafts is considered the gold standard compared to all other rehabilitation techniques.

Cases: The purpose of this presentation is to explain the augmentation of severely atrophic maxillary and mandibular crests with extraoral (anterior iliac crest) and intraoral (mandibular ramus – symphysis) grafts. In two patients, augmentation of mandibular and maxillary atrophy was performed with grafts taken from the anterior iliac crest, and in one patient, augmentation of maxillary atrophy was performed with grafts taken from the mandibular ramus and symphysis.

Conclusion: The selection of the donor site largely depends on the amount of bone required. When relatively large defects need to be augmented, grafts taken from the iliac crest are often used. Block and particle grafts taken from the mandibular symphysis or ramus give successful results in the augmentation of the jaws or maxillary sinus. Both donor sites are associated with good predictability and low complication rates.

Keywords: Dental İmplants, Iliac Crest, Intraoral Bone Grafts

OP-024

Enucleation of the Dentigerous Cyst Spreading to the Orbital Floor with Caldwell-Luc and Closure of the Oroantral Communication with Bichat Fat Tissue Flap

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Objective: Dentigerous cysts are among the frequently encountered odontogenic cysts, and they are often associated with impacted mandibular third molar teeth. They are often detected during routine dental radiographs and are asymptomatic.

Case: In this case report, the surgical treatment process of a large dentigerous cyst arising from an impacted third molar tooth in the maxilla of a 18-year-old female patient by enucleation under general anesthesia is presented. Our patient, who is systemically healthy, was referred to our clinic from an external center to have his upper right impacted wisdom tooth extracted. Intraoral examination of the patient revealed that the upper right third molar tooth had not erupted. In the panoramic radiograph taken for radiological examination, it was observed that the upper right third molar tooth was located more superior-posterior than the normal position and was in close proximity to the maxillary sinus. Dental Volumetric Tomography was taken from the patient due to suspicion of cyst. In tomographic sections, a cystic structure with well-defined borders was detected, originating from the impacted third molar tooth and spreading to the orbital floor, completely filling the maxillary sinus. The cystic structure was completely excised and tooth number 17 was extracted with the Cadwell-Luc operation under general anesthesia. The oroantral communication formed by the tooth extraction socket was closed primarily with both buccal flap and bichat fat tissue.

Conclusion: As a result, dentigerous cysts can cause large bone defects without symptoms. Therefore, it is very important to have a routine dentist examination and radiographic examination of all impacted teeth.

Keywords: Bichat fatty tissue, Caldwell-Luc, Dentigerous Cyst

OP-025

Decompression Treatment for Ameloblastoma with Impacted Canine in a 9-year-old: A Case Report

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Objective: Ameloblastoma is the most common odontogenic tumor and considered as a benign tumor with a locally invasive growth pattern. Treatment of ameloblastoma is focused on surgical resection with a wide margin of normal tissue because of its high propensity for loco-regional invasion, but this is often associated with significant patient morbidity. The aim of this presentation is to show the successful recovery of a 9 year-old patient who underwent a decompression treatment as an alternative to jaw resection which could have caused massive discomfort for the patient.

Case: A 9- year-old female patient presented with swelling in the right posterior mandibular region. Clinical and radiographic assessments revealed an unilocular cystic lesion presented with an impacted canine. Under local anesthesia, biopsy and decompression of the cystic lesion were performed and the result showed a unicystic ameloblastoma. Because of the patient's age and the localization of the tumor, an aggressive treatment such as resection was not considered as the first treatment option. Regular biopsies were made during long periods of visits. After 3 years of decompression treatment, the tumor became smaller and the impacted teeth has also erupted.

Conclusion: Decompression treatment of ameloblastoma can be considered as a conservative management modality before the growth cessation of pediatric patients. Sometimes ameloblastomas can heal solely with decompression treatment.

Keywords: decompression, resection, unicystic ameloblastoma

OP-026

The Effect Of Different Sounds İn The Waiting Room On Anxiety Levels Before Impacted Wisdom Teeth Surgery and Postoperative Pain Levels

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Objective: The aim of this study is to assess the impact of four different ambient sounds in the waiting room prior to impacted wisdom teeth surgery on patients' preoperative anxiety levels and postoperative pain levels.

Materials-Methods: The participants were randomly assigned to one of the four waiting room groups: silence, clinical noise, white noise, and classical music. The patients spent 15 minutes in their respective waiting rooms before undergoing impacted wisdom tooth surgery. Anxiety levels were assessed using the State-Trait Anxiety Inventory (STAI) and Modified Dentistry Anxiety Scale (MDAS) immediately after the waiting period. Pain levels on the 3rd postoperative day were evaluated using a visual analog scale rangin.

Results: The study included a total of 198 participants. When both the STAI and MDAS scores were evaluated, there were no statistically significant differences observed among the study groups ($p=0.682$ and $p=0.119$, respectively). There was a statistically significant difference observed among the study groups in terms of the postoperative 3rd day pain score ($p<0.005$). It was found that the silent environment group differed significantly from the other groups (p values of 0.000, 0.025, and 0.021, respectively), while no statistically significant difference was observed between the other groups.

Conclusion: Although the decrease in anxiety levels in the classical music and white noise groups was not statistically significant, the results suggest a potential positive impact of these interventions.

Keywords: Anxiety; Extraction; Impacted wisdom teeth; Pain

OP-027

Vacuum-Formed Splints with Iodoform-Impregnated Gauze: An Effective Approach for Postoperative Care in the Palatal Area

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Objective: The aim of this case series was to investigate the impact of vacuum-formed splints (VFS) with iodoform-impregnated gauze on postoperative hemostasis, infection control, and patient comfort level after excision of various palatal pathologies.

Case: Three patients with different age groups and genders, diagnosed with idiopathic palatal fibromatosis, inflammatory fibrous hyperplasia, and pleomorphic adenoma, underwent total excision of their lesions. Iodoform-impregnated gauze (Best Dental, Turkey), to cover the wound area left for secondary healing, was placed in the VFS prepared by taking impressions from the patient in the pre-operative period, and the splint was fixed to the maxilla with 3.0 silk sutures (Doğsan, Turkey). The splint was left in place for seven to ten days, after which sutures were removed and the splint was cleaned and delivered to the patients. Patients were informed that they could wear and remove the splints as long as they felt pain or discomfort during the function and about wound care.

Conclusion: Results indicate that VFS offers a comfortable, user-friendly alternative to traditional methods such as bulky gauze packaging or acrylic splints, reducing discomfort, facilitating postoperative diet resumption, and mitigating post-surgical pain. Moreover, the technique aids in immediate hemorrhage control, provides antimicrobial protection, and serves as a removable protective guard during the recovery phase. Overall, VFS with iodoform-impregnated gauze demonstrates promise as an efficient, cost-effective approach for postoperative care in palate surgeries.

Keywords: vacuum-formed splint, iodoform-impregnated gauze, postoperative care

OP-028

Radiographic Evaluation of The Changes seen in The Nasal Cavity After Dental Implant Placement Simultaneously with Nasal Floor Elevation

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Objective: One of the important anatomical limitations in dental implant surgeries performed in the maxilla is the relationship of the nasal cavity with the alveolar crest. It is an important challenge for practitioners, as it may cause some complications in cases where the nasal cavity has a close relationship with the alveolar crest. In such case, nasal floor elevation may be needed.

Case: Implant surgery was planned for a 56-year-old female patient to eliminate maxillary complete edentulism. It was observed that the nasal cavity-alveolar crest distance was insufficient. Nasal floor elevation was planned simultaneously with implant surgery. The changes seen in the nasal cavity were evaluated from the 6th and 12th month control tomography scans after the procedure.

Conclusion: Observations made in cross-sectional images showed that there was an increase in the amount of bone on the palatal, mesial and distal edges of the 7 implants placed in the patient. It was observed that in some areas where the implants were placed, the thickness of the nasal mucosa increased, while in others the same thickness was maintained. Additionally, it is observed that there is a decrease in the volume of the inferior turbinates after the nasal base elevation procedure.

Keywords: Dental implant, Nasal floor elevation, Nasal cavity

OP-029

A New Reference for 3D Digital Orthognathic Surgery Planning: Barcelona Line

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Objective: Orthognathic surgery is now an indisputable tool for functional and esthetic rehabilitation. The change in the perception of facial esthetics has led to the need to define different and repeatable parameters, and Barcelona line (BL) is one of the recently defined ones. The aim of this study was evaluate the final digital orthognathic surgical planning of Class 2 and Class 3 patients according to BL reference.

Materials-Methods: In patients who were planned and operated by the same orthodontist and surgical team with digital planning according to the true vertical line (TVL), the distance of the upper incisal tip (UI) to the BL was measured. Patients were grouped according to distance between UL and BL. Group 1; UL-BL: ≤ -4 mm, Group 2; UI-BL: -4 to 0 mm, Group 3; UL-BL: 0 to 4 mm and Group 4; UI-BL: ≥ 4 mm. The position of the midfacial projection relative to the BL was investigated in Class 2 and Class 3 patients.

Results: In most of the patients planned according to TVL, UI point was positioned in front of the BL post-operatively in Group 3 and Group 4. Particularly the Class 2 patients were mostly in Group 2 and 3.

Conclusion: In addition to the widely used facial esthetic parameters defined previously, BL is a current and valid parameter in orthognathic surgery for the evaluation of esthetic results in relation to soft tissue nasion and hard tissue maxillary incisor point, and can be used as an alternative to TVL.

Keywords: Barcelona Line, Orthognathic Surgery, 3d Planning

OP-030 Alveolar Cleft Treatment Using Iliac Bone Graft: Case Report

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Objective: Alveolar clefts are one of the most common birth defects that can significantly affect both the aesthetic and functional aspects of an individual's life. These clefts may cause difficulties in speech, nutrition, and dental development. Various techniques are available to successfully treat these defects.

Case: An 18-year-old female patient applied to our clinic with aesthetic and phonetic complaints caused by an alveolar cleft in the maxillary lateral tooth area. During the examination, it was observed that the patient's left lateral tooth was missing and she had an oronasal fistula. Unilateral alveolar cleft was treated with a graft taken from the iliac bone region in order to provide the appropriate bone structure and gain appropriate support for dental prostheses.

Conclusion: Patients suffering from alveolar clefts need appropriate treatment. This case report proposes a surgical technique that uses a combination of hard and soft tissue management to improve the oral health, speech, and quality of life of such individuals.

Keywords: alveolar bone cleft, alveolar bone graft, iliac bone graft

OP-031

Adenomatoid Odontogenic Tumor associated with a fibrous lesion: A Rare Case Report

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Objective: Adenomatoid odontogenic tumors are known to be lesions that occur most frequently in the second decade, in females, and predominantly in the anterior region of the maxilla. The tumor is often associated with an impacted tooth or a dentigerous cyst. It causes expansion of the bone and radiologically appears as a well-defined radiolucent lesion. The presence of calcifications within the lesion and its radiopaque appearance are characteristic. Conservative treatment is typically simple enucleation.

Case: A 13-year-old male patient presented to our clinic with a swelling complaint that had been increasing over the past 6 months in the anterior region of the right mandible. Radiological and clinical examinations revealed a lesion associated with an impacted canine tooth that appeared radiolucent, resembling a dentigerous cyst, with well-defined and regular borders. Biopsy results confirmed the lesion to be an adenomatoid odontogenic tumor. Due to its large size, the lesion was enucleated following decompression treatment. During decompression treatment, a fibrous lesion developed around the lesion, which was determined to be fibrous dysplasia upon excision along with the lesion.

Conclusion: Although rare, adenomatoid odontogenic tumors can be seen together with fibrous lesions. While the treatment of these tumors is indicated as simple enucleation in the literature, the size of the lesion and its associated with other lesions can alter treatment options. This case report suggests a surgical treatment using decompression for adenomatoid odontogenic tumors seen with large-sized lesions and fibrous lesions.

Keywords: Adenomatoid odontogenic tumor, fibro-osseous reaction, decompression treatment

OP-032

Comparison of Imaging Features of Intraosseous Jaw Lesions on Panoramic Radiographs and CBCT

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Objective: The aim of this study was to evaluate the imaging characteristics of intraosseous jaw lesions on panoramic radiographs (PAN) and cone beam computed tomography (CBCT).
Materials-Methods: 172 sets of PAN and CBCT images of 181 intraosseous jaw lesions were analyzed according to localization, shape, size, internal structure, borders, associated non-erupted tooth, root resorption, tooth displacement, affecting anatomical structures, cortical thinning, expansion and destruction of bones. The Cohen's kappa coefficient and interclass correlation coefficient were used in the statistical analysis.

Results: PAN and CBCT images of 181 bone lesions, 68 in the maxilla and 113 in the mandible were analyzed. 56 of these lesions were in the anterior region, 118 were in the posterior region and 7 were in both region. The PAN evaluation allowed the identification of the lesion's location, the lesion's internal contents, the presence of an associated non-erupted tooth and tooth displacement. The CBCT scan analysis showed the same characteristics and in addition it was more accurate than PAN in the assessment of the lesion shape, the borders of the lesion, the presence of root resorption, and in the buccolingual/buccopalatinal expansion of cortical bone, cortical thinning and cortical destruction.

Conclusion: CBCT demonstrated a greater number of imaging characteristics of intraosseous jaw lesions compared with PAN. Defining the boundaries and extension features of the bone lesions could guide surgical plans and minimizing the risk of damage to surrounding vital anatomic structures.

Keywords: jaw pathologies, CBCT, Panoramic radiograph

OP-033

Learning from Missed Clues: A Case Promoting Vigilance in OSCC Recognition

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Objective: Oral squamous cell carcinoma (OSCC) accounts for more than 90 % of malignant tumours of the oral cavity. It is most likely to appear in males over 40 years of age. Smoking, alcohol consumption and poor oral hygiene are identified as the most common etiological factors. The first sign is asymptomatic ulcerations clinically. Early diagnosis of OSCC is crucial, because of improved survival rates compared to late-stage diagnosis. Precursor lesions present with ulcerative/erosive lesions identified through clinical examination aid in diagnosing.

Case: A 45-year-old male, heavy smoker (three packs per day) with daily alcohol use with no relevant medical history, presented for evaluation of a 3-month history of persistent pain and swelling in the right mandibular third molar extraction site. Radiographic examination revealed a well-defined 1 cm radiolucency suggestive of post-extraction site. Intraoral examination identified a tissue with protruding edges, raised from the mucosa, irregular in shape, and firmly attached to the base, located on the buccal aspect of the extraction site. A diagnosis of OSCC was suspected, and biopsy was taken. Pathology results confirmed our preliminary diagnosis. Subsequent mandibular cancerous alveolar bone resection was performed and the affected lymph nodes were removed.

Conclusion: The 5-year-survival rates are higher in stage 1 (80%) compared to stage 2 (62%) and stage 3 (42%) disease. While treatment advancements have improved outcomes, early diagnosis through identification of precursor lesions remains crucial for maximizing survival chances.

Keywords: Oral cavity squamous cell carcinoma, Oral cavity cancer, segmental mandibulectomy

OP-034

A Retrospective Analysis of Benign Paediatric Jaw Lesions and A Conceptual Overlook at The New World Health Organization (Who) Classification of Odontogenic Lesions

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Objective: The primary aim of this study was to evaluate the benign paediatric jaw lesions according to the 4th edition of World Health Organization (WHO) classification of odontogenic lesions treated in a single center. The secondarily aim of the study was to discuss our results regarding the updates from the 5th edition of WHO classification of odontogenic lesions published in 2022.

Materials-Methods: Demographic data, symptoms, radiographic findings, location, size, histopathologic diagnosis, treatment modalities, and outcomes were analysed retrospectively. Recurrence incidence, time to recur, and follow-up time were also evaluated.

Results: One hundred seven lesions were diagnosed in 100 patients (44 female, 56 male). The mean follow-up time was 56.6 months. The mean age was 12. 9 + 3.9 years. The majority of lesions were found in the permanent dentition group ($p<0.05$). 36% of the patients were asymptomatic at presentation. The most common jaw lesions (73%) were odontogenic cysts, followed by odontogenic tumors (16%) and nonodontogenic tumors (11%). 83% of the lesions were radiolucent and 93% lesions were well-circumscribed. The majority of the patients (96%) were treated by enucleation. The recurrence rate was 3%.

Conclusion: The present study from a dental school demonstrated a somewhat different spectrum of benign paediatric jaw lesions according to the 2017 WHO classification compared with that reported from medical institutions. Benign paediatric jaw lesions generally responded well to conservative surgical treatments with a low recurrence rate. Our results did not change considering the 5th edition of the classification of odontogenic lesions.

Keywords: Oral and maxillofacial pathology, WHO classification, Paediatric jaw lesions

OP-035

Surgical Repair of Oroantral Fistulas After Tooth Extraction with Bichat Fat-Pad

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Objective: Repair of oroantral fistulas with bichat fat pad

Case: Three male patients who applied to our clinic with various complaints after tooth extraction and were diagnosed with an oroantral space were operated to close the oroantral space after systemic and clinical anamnesis. Considering the patients' space size, tension-free closure and the advantages of the method, it was decided to close it with a buccal fat tissue flap. After the trapezoid flap was designed, the intracheek fat tissue was accessed by blunt dissection through the flap. The fatty tissue was advanced to cover the relevant oroantral space area and sutured to the palatal mucosa. After the stitches were removed on the 10th day, the valsalva maneuver was performed to check for patency. It was determined that the patients' complaints disappeared and the patients were followed for 6 months after the operation.

Conclusion: Many methods have been described for the treatment of oroantral fistulas. In addition to traditional methods such as simple mucosal flaps, buccal flaps or pedicled palatal flaps, various new methods are also described. Bichat fatty tissue flap closure is a method that has proven to be successful for the treatment of oroantral fistulas and has several advantages.

Keywords: oroantral fistula, bichat

OP-036

Management of Mandibular Condylar Osteochondroma: Multimodal Treatment Strategies

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Objective: Mandibular condylar osteochondroma can result in facial asymmetry, malocclusion, and temporomandibular joint dysfunction. There have been different surgical approaches for the treatment of the osteochondroma considering the size, growth direction and esthetical requirements. Three patients with osteochondroma of the TMJ and the different treatment approaches are presented here.

Case: Twenty-eight-year-old female patient referred to our hospital with facial asymmetry and occlusal canting due to the pathological overgrowth without any malocclusion. Forty-five-year-old male patient referred with a slightly limited mouth opening. Occlusion was not affected hence not any intraoral finding was evident in the male patient. Twenty-five-year-old female patient with pain in the right TMJ and occlusal canting referred without limitation of the function. Osteochondroma was removed, subsequently autogenous fat transplantation was performed for the first two of the patients, and last one completed without fat grafting. All three patients were consulted with the orthodontics department prior to surgery, just the patients with occlusal canting received orthodontic treatment. All cases presented satisfactory facial esthetic and TMJ function; two of them with abdominal fat grafting after 2 year- follow up and one case with digital planning of postoperative orthodontic treatment without fat grafting after 1 year follow up.

Conclusion: Orthodontic and orthognathic procedures after removal of osteochondroma should be planned due to the esthetical and functional requirements. The need for further treatments is not only related with the osteochondroma size but also the direction of growth.

Keywords: Osteochondroma, TMJ, Mandibular Asymmetry

OP-037

Severe Subcutaneous Emphysema: A Report of Two Cases

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Objective: Subcutaneous emphysema (SE) is the presence of air under the soft tissues of the skin. It can be caused by medical conditions, trauma, or iatrogenic causes. Although it is mostly a benign and self-limiting complication, the consequences may be severe and life-threatening. The aim of this study is to present the diagnosis and treatment of two SE cases that occurred after dental procedures.

Case: A 14-year-old female patient was referred to our clinic from the ear, nose, and throat (ENT) department with a severe SE involving the retropharyngeal and periorbital areas, which occurred after dental filling. The patient's treatment was carried out through the combined intervention of the ENT, ophthalmology, and oral maxillofacial surgery departments. In the second case, severe sepsis occurred in a 20-year-old female patient, 2 hours after surgical excision of a maxillary cyst. The diagnosis of SE was made based on a physical examination and a computerized tomography scan. Clinical surveillance and IV antibiotic treatment were performed in both cases.

Conclusion: Early diagnosis and accurate treatment based on understanding its characteristics are important in the prognosis of SE. Patient reassurance, antibiotic prophylaxis, and analgesics, if necessary, are usually sufficient.

Keywords: subcutaneous emphysema, dental procedures, case reports

OP-038

Box and Wing Genioplasty: A Case Series

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Objective: Osseous genioplasty, the alteration of the chin through skeletal modification, can lead to significant enhancement of the facial aesthetics and harmony. All sliding, box and chin wing genioplasty techniques are currently used to correct morphologic abnormalities of the menton. A case series was designed to study these two different techniques of genioplasty with regards to patient satisfaction, aesthetic results and complications encountered during and post operation.

Materials-Methods: All subjects underwent either box or wing genioplasty, operated by the same surgeon, as a component of bimaxillary orthognathic surgery between September 2021 and January 2024, with a minimum follow up of 6 months, were included. Post- operative evaluation included patient satisfaction evaluated by a subjective questionnaire administered at the follow up appointment, complications including permanent and temporary inferior alveolar nerve damage and photographic evaluation of the aesthetic results.

Results: A total of 18 subjects underwent genioplasty, with at least a 6 months of follow up in the study period. This included 9 female and 9 male subjects, with a mean age of 28.2 years (20-39 years). All subjects underwent genioplasty as a part of orthognathic surgery while 10 subjects underwent box and 8 underwent wing genioplasty. There were no significant complications. Seventeen subjects (94.4%) were extremely pleased with the results with only one subject expressing hesitations, without, demanding further procedures.

Conclusion: Both box and wing genioplasty is a relatively safe and effective means of creating a harmonious and aesthetic facial profile by making alterations in the chin morphology with minimal complications.

Keywords: Aesthetic Surgery, Chin Deformity, Genioplasty

OP-039 Unicystic Mural Type Ameloblastoma in a A Child: A Case Report

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Objective: Ameloblastoma is the most common odontogenic tumor of the jaws. Ameloblastoma usually develops aggressively. It has a high recurrence rate after conservative treatment. While ameloblastoma constitutes 1% of tumors and cysts in the maxilla and mandible, it accounts for 10% of tumors of odontogenic origin. It is frequently seen in the mandibular ramus and angulus region. It is commonly seen in middle-aged women and men.

Case: In our case report, a unicystic lesion was detected in the mandibular ramus region in the radiological examination of a 14 years old male patient who applied with the complaint of swelling and pain in the left lower molar region. A diagnosis of unicystic mural ameloblastoma was made as a result of the histopathological examination of the biopsy taken from the patient. The lesion was treated with enucleation and curettage after marsupialization. The patient is being followed up in our clinic.

Conclusion: Ameloblastoma is an odontogenic lesion that is frequently seen in the mandible ramus and angulus region. In this case, marsupialization treatment is applied, in which the pressure inside the cyst is reduced and the cyst shrinks. By performing marsupialization, the continuity of the surrounding hard and soft tissues was preserved. Enucleation and curettage treatment was applied when the cyst shrank sufficiently. In the 6-month follow-up radiograph of the patient, the area was completely healed.

Keywords: Ameloblastoma, odontogenic tumors, oral pathology

OP-041

Very Rare Tumour Of The Palate: Basal Cell Adenoma

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Objective: Our aim in this case report was to explain Basal Cell Adenoma(BCA). BCA is a rare benign salivary gland tumour that develops from basaloid epithelial cells without polymorphism. It commonly affects the parotid gland, followed by the upper lip, buccal mucosa and palate. The tumour on the palate appears as a dome-shaped painless hard swelling that grows slowly. Although the pressure of the tumour causes resorption in the bone, the bone invasion of the tumour is not seen.

Case: The patient was admitted to our clinic with a swelling of the palate that caused a very mild speech disorder. A 50-year-old female patient had no health problems and excision of the tumour was planned. The tumour was excised extensively including the periosteum and the exposed bone was covered with dermal allograft. With the acrylic plate, traumatization of the wound and grafted area was prevented and rapid healing was achieved. Two weeks later, epithelialisation was seen and no complications were observed. At the last control of the patient, no recurrence was observed.

Conclusion: Wide excision seems to be the only treatment option for these rare tumours. After excision of the tumour, the exposed palatal bone can be left for secondary healing or completely closed with a pedicled buccal fat pad, buccal mucosal flap, or synthetic, allogeneous, autogenous dermal grafts. Because it has a high recurrence rate, long-term follow-up must be applied to these patients.

Keywords: Adenom, Dermal Allograft, Polymorphism

OP-042

A Comparison of Khoury and Urban Techniques in Horizontal Bone Deficiencies: A Retrospective Analysis

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Objective: In this study, the clinical results of two surgical methods for reconstructing narrow edentulous ridges were compared: the Urban technique, which used autologous bone chips and xenograft mixture along with collagen membranes for guided bone regeneration, and the Khoury technique, which used autologous bone block grafting without membranes.

Materials-Methods: 42 partially edentulous patients with bone width <4 mm were assigned into two groups: 18 patients received the Urban technique (Group I) and 24 patients received the Khoury technique (Group II). Baseline, two weeks after bone augmentation, and after prosthetic loading, the gain and change of ridge width were measured.

Results: The mean baseline horizontal bone width (HBW) measurements were 3.1 ± 0.8 mm for Group I and 3.0 ± 0.9 mm for Group II. Two weeks after graft placement, results were comparable between the two groups (7.5 ± 0.7 mm for Group I and 7.0 ± 0.6 mm for Group II). Similarly, there was no statistically significant difference in HBW gain four months after dental implant placement between the two treatment groups ($p > 0.05$). Both groups showed significant increases in horizontal bone width, with Group I gaining 4.04 ± 0.96 mm and Group II gaining 4.35 ± 1.12 mm ($p < 0.01$) of bone. The effectiveness of both methods was found comparable when evaluating bone gain at various time points. In four cases, Group II required additional bone grafting with guided bone regeneration in the anterior region to improve aesthetic outcomes.

Conclusion: Both methods were effective in augmenting narrow edentulous ridges, with the Urban technique having the potential to produce more acceptable esthetic results at the anterior region.

Keywords: bone augmentation, dental implants

OP-043

Retrospective Analysis of the Impact of Sagittal Split Ramus Osteotomy on Lateral Pterygoid Muscle Volume and Condyle Position: A Cone-Beam Computed Tomography Study

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Objective: This study aimed to evaluate the changes in lateral pterygoid muscle volume (LPMV) and condylar axial angle (CAA) after correction of mandibular asymmetry with sagittal split ramus osteotomy (SSRO) superimposing cone-beam computed tomography (CBCT) images obtained before and after the procedure.

Materials-Methods: This study included individuals who underwent SSRO and had pre- and postoperative CBCT records. Study groups were defined as asymmetric and symmetric using linear measurements from the dental midline based on a three-dimensional coordinate system. Patients with asymmetry <2 mm constituted the control group, while patients with asymmetry >4 mm constituted the study group. LPMV and CAA measurements, the parameters evaluated in the study, were performed using 3D Slicer software.

Results: LPMV exhibited a statistically significant increase in the control, deviation, and contralateral groups, with the most significant difference in percentage change observed in the deviation group ($p < .01$). Conversely, CAA remained unchanged in the control group ($p = .147$) but demonstrated increases in the deviation group ($p = .008$). In contralateral group, CAA showed no significant change ($p = .509$).

Conclusion: The current increment in muscle volume is assumed to be related to the functional benefits of the surgeries. The CAA is thought to be affected by both the skeletal and functional results of SSRO. These changes suggest a significant impact on the biomechanical environment of the temporomandibular joint and surrounding musculature. SSRO seems to be a suitable treatment choice to achieve optimum bilateral harmony. Further investigation is required to evaluate the extended functional outcomes and stability of asymmetry correction.

Keywords: Facial Asymmetry, Sagittal Split Ramus Osteotomy, Temporomandibular Joint

OP-044

Examination of the Effect of Surgical Guides of Different Designs Used in Dental Implant Surgery on Bone Heat Increase in In-Vitro Environment

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Objective: Surgical guides are produced to ensure that the planning is correctly transferred to the surgery to be performed. However, surgical guides also have disadvantages. The most important of these is the increase of temperature in the bone. This study aims to investigate the effects of surgical guides of different designs on the temperature rise during the opening of dental implant sockets.

Materials-Methods: In this study, two different surgical guides, traditional and windowed, as well as artificial bone models in which the implant slots will be drilled, were designed in the computer environment. Six study groups were formed with all variables and 10 implant slots for each group were opened under saline physiological cooling. For each implant slot, statistical analysis was performed with the temperature measurements obtained from both the apical and neck region using a thermocouple device.

Results: Both surgical guides increased the temperature in the neck region, the windowed surgical guide caused less temperature increase compared to the traditional surgical guide. In the apical region, there was no significant difference between the two designs in terms of temperature increase.

Conclusion: The use of a surgical guide in dental implant surgeries reduces the effectiveness of irrigation and causes an increase in temperature. The windowed surgical guide, which we designed with the aim of reaching irrigation more effectively to the implant sockets created using a surgical guide, caused a lower temperature increase compared to the traditional surgical guide, especially by allowing irrigation to reach the neck region.

Keywords: bone heat generation, dental implant, surgical guide

OP-045

Comparison of Medical-Conservative Treatment and Surgical Treatment in MRONJ (Medication Related Osteonecrosis of the Jaw) Patients

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Objective: Medicated-related osteonecrosis of the jaw (MRONJ) is a rare condition that seriously affects the quality of life and the success of conservative and surgical treatment methods in the management cannot be concluded in the literature. Our aim in this study was to contribute to the literature by evaluating the follow-up results of MRONJ cases diagnosed at different stages after conservative treatment method including long-term antibiotherapy or surgical treatment protocol.

Materials-Methods: MRONJ cases at different stages diagnosed in our clinic were treated with conservative treatment protocol including long-term antibiotherapy or surgical treatment method and the pre-treatment and post-treatment findings were evaluated clinically and radiologically.

Results: Spontaneous sequestration occurred in 79.16% of our patients with conservative treatment approach and all lesions were found to reduce the size of the lesions by providing soft tissue cover spontaneously. 54.16% of the lesions required recurrent antibiotherapy. In the surgical treatment protocol, recurrence was reported with a rate of 50% on the same site.

Conclusion: In conclusion, conservative treatment protocol is a recommended treatment protocol to be preferred alone or before surgical approach because it provides spontaneous sequestration of necrotic bone in appropriate patients.

Keywords: Conservative treatment, Long-term antibiotherapy, MRONJ

OP-047

Ameloblastoma Cases With Long Term Follow Up Periods: Our Clinical Experiences

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Objective: Ameloblastoma is a benign epithelial tumor that has aggressive, destructive and unlimited growth potential, having the capacity for recurrence and malignant transformation. The methods of treatment consist of radical surgery (segmental resection) and conservative treatments (mild to severe bone curettage). Therefore, a reconstruction plate (RP) is essential for the treatment of relatively large tumors. The treatment of ameloblastoma in seven different patients will be described in this retrospective study.

Materials-Methods: Nine Ameloblastoma patients were retrospectively evaluated. The patients' genders, ages, surgical approaches, recurrence status, placement of RP, follow-up duration and surgical techniques were examined numerically and percentage-wise using Excel software.

Results: Two patients' follow-up periods were missed; hence, 7 patients were included in this study. 5 male and 2 female patients with a 49,5-year-old age average were investigated. The average follow-up period is 7 years. Extraoral approach was applied to 4 patients, and RP were placed for all of them while intraoral approach was applied to 3 patients and RP was placed for one of them. Severe curettage was performed on 4 patients, marginal resection was performed on 2 patients, and segmental resection was performed on one patient. Recurrence was observed in 2 patients. One of them underwent curettage, while the other underwent marginal resection.

Conclusion: Ameloblastoma may be very aggressive according to its pathological nature, so the treatment techniques, approaches, and close follow-up are essential. This study emphasizes that the curettage patients should be followed up regularly.

Keywords: ameloblastoma, marginal resection, reconstruction plate

OP-048 Managing Destructive Cemento-Ossifying Fibroma in Kaws - A Case Series

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Objective: Benign fibro-osseous lesions are pathological conditions characterized by the replacement of normal bone with cellular fibrous connective tissue that undergoes mineralization. Diagnosis of these lesions can be challenging due to overlapping clinical, radiological, and histological features and can cause diagnostic dilemmas for surgeons, radiologists, and pathologists. The rare type of benign fibro-osseous lesion is cemento-ossifying fibroma (COF), a definitive form of benign fibro-osseous tumor affecting the craniofacial region, especially the jaws (70%).

Case: In this study, cases of destructive COF and treatment methods in 3 female patients aged 16, 24 and 29 are presented. This case series emphasize the importance of considering cemento-ossifying fibroma as a differential diagnosis for fibro-osseous lesions in the maxillofacial region, and the necessity of appropriate evaluation and diagnosis to determine the appropriate treatment plan and prognosis.

Conclusion: In summary, the diagnosis of benign fibro-osseous lesions can be challenging due to their characteristics, but early diagnosis and appropriate evaluation are essential for successful treatment results. COF is a rare type of benign fibro-osseous lesion that should be considered as a differential diagnosis for other fibro-osseous lesions in the maxillofacial region and necessary steps should be taken to confirm the diagnosis before reaching a conclusion.

Keywords: Cemento-ossifying fibroma, destructive, jaws

OP-049

The Effect of Orthognathic Surgery on Clinical Signs of Temporomandibular Disorders

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Objective: The aim of this study was to compare the preoperative and postoperative clinical findings between patients who had TMD treatment because of TMD symptoms and who did not receive any treatment before orthognathic surgery due to dentofacial skeletal malocclusion.

Materials-Methods: Patients were categorized into two groups: Group 1 received no preoperative TMD treatment and group 2 had preoperative TMD treatment. Preoperative and postoperative patient records and TMD symptoms were analyzed. Statistical analysis was performed using Mann Whitney-U and Student t-tests.

Results: The study included 60 patients (20 males, 40 females) with a mean age of 22.46 ± 5.15 years. 15 patients had skeletal class 2 malocclusion and 45 patients had skeletal class 3 malocclusion. Disc displacement with reduction was bilateral in 28 patients, left-sided in 22 patients and right-sided in 10 patients. In group 2, all patients were treated with conservative therapy. In the comparison of postoperative pain, the VAS scores were significantly lower in group 2 than in group 1 ($p=0.011$). There was a decrease in TMJ sounds and deviation in postoperative data compared to preoperative data. Patients in group 2 showed a reduction in postoperative pain, deviation and joint noises compared to group 1 in the clinical symptom evaluation.

Conclusion: Orthognathic surgery has a direct effect on TMJ. Preoperative TMD treatment prior to BSSO helps to reduce postoperative pain, joint noises, and deviation.

Keywords: Orthognathic Surgery, TMD, TMJ treatment

OP-050

Assessment of Changes in Mandibular Trabecular Structure of Type 2 Diabetic Patients by Fractal Analysis Method on Panoramic Radiographs

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Objective: Diabetes mellitus (DM) is a widespread metabolic disease that may have negative effects on trabecular and cortical structure of bone tissue. Fractal dimension (FD) analysis is a mathematical method that can assist in quantifying complex structures and can be used to define the complex structure of the trabecular bone and has started to be used in evaluating the quality of alveolar bone. The aim of this retrospective study is to compare the bone mineral density in patients who have Type 2 DM and non-diabetics by fractal dimension analysis on panoramic radiographs.

Materials-Methods: Panoramic radiographs of 106 patients (study group:53; control group:53) were evaluated on the criteria of clearly visible mandibular molar, premolar, anterior regions and condyle. FD values of different regions of mandible were calculated by using the program ImageJ version 1.3 software (National Institutes of Health, MD, USA) and comparison was made between the control and study groups.

Results: There were no significant difference of FD values between study and control groups in different regions of mandible overall. Mean age of patients with T2DM was 56.68 and the female patients are more than the male patients in the study group.

Conclusion: According to our results, Type 2 Diabetes mellitus mostly affect over middle aged, female patients but bone mineral density was not affected by T2DM. The major limitation of this study was the small sample size, which might have prevented some associations to reach statistical significance.

Keywords: diabetes melitus, fractal dimension analysis, mandibular bone

OP-051

An Unusual Large Sialolith (Megalith) in the Submandibular Duct: A Case Report

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Introduction: Sialoliths are formed by the precipitation of calcium and phosphate salts as a result of low salivary flow and changes in the physical and chemical structure of the glandular secretion. It is most commonly seen in the submandibular duct and in men over middle age. Sialoliths larger than 15 mm in diameter are called megaliths and rarely reach these sizes.

Case: A 65-year-old male patient presented to the clinic with complaints of bad breath and swelling of the floor of the mouth. Bidigital palpation revealed the hard mass to be located in the sublingual region, independent of the bone, and the diagnosis was supported by ultrasound imaging. The panoramic radiograph showed a well-circumscribed radiopaque mass at the level of the mandibular occlusal line, measuring 20x16 mm. An elliptical incision was made under local anaesthesia and the lesion was dissected from the surrounding tissues. Inferior and posterior pressure was applied to prevent displacement of the lesion during dissection. The region was closed with 3.0 Vicryl suture in a manner that did not suppress salivary flow and the patient was discharged. Postoperative follow-up showed no change in Wharton's duct function and continued salivary flow.

Conclusion: Sialoliths are frequently encountered lesions in oral and maxillofacial surgery. Sialoliths that remain undiagnosed for a long time will grow and become megaliths and may cause structural and functional changes in the submandibular gland. For this reason, it is important to diagnose sialoliths at an early stage by routinely examining the floor of the submandibular gland.

Keywords: Megalith, Sialolith, Submandibular duct

OP-052

Garre Osteomyelitis Caused By Odontogenic Lesion: A Case Report

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Objective: Garré's sclerosing osteomyelitis is a form of chronic osteomyelitis characterized by a periosteal reaction around the jaw, usually affecting children and young adults. This may occur due to odontogenic infection, after tooth extraction, or due to tooth eruption. Clinically, patients have an asymptomatic hard bone swelling. It is usually seen in the posterior mandible and unilateral. The aim of this Case report to present the extraoral, intraoral, and radiographic findings and postoperative pursuits of a patient diagnosed with Garre's osteomyelitis.

Case: A 17-year-old female patient presented to our clinic with swelling and pain in the left mandible. Radiographic examination showed a lesion about the 2nd molar tooth and computed tomography (CT) clearly showed new bone formation in layers in the external cortex. The related teeth were extracted and the lesion was curetted. Histopathological evaluation resulted in chronic inflammation. Symptoms completely recovered in the 8-month follow-up.

Conclusion: The current general opinion regarding the treatment of Garre's mandibular osteomyelitis is that a thorough radiographic and clinical examination should be performed and the causative agent eliminated to ensure a correct diagnosis and to apply the ideal treatment. This is followed by a gradual remodeling of the bone, usually without the need for additional surgical treatment.

Keywords: chronic osteomyelitis, ossifying periostitis, periostitis

OP-053

Evaluation of The Effectiveness of Tranexamic Acid Application Protocol With Different Doses on Bleeding, Edema and Physician Comfort in Bimaxillary Orthognathic Surgery Patients

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Objective: Orthognathic surgery is a commonly used surgical method to correct dentofacial deformities. Intraoperative bleeding, edema and the quality of surgical field visibility are important factors in orthognathic surgery affecting surgeons and patients comfort. This study aim was to evaluate the effects of tranexamic acid application with different doses on bleeding, quality of surgical field visibility and postoperative edema in bimaxillary orthognathic surgery patients.

Materials-Methods: Our study is a prospective, randomized, double blinded clinical controlled trial total of 64 patients in three different groups. Group 1 and Group 2 consist of patients who received 1(250 mg) and 2(500mg) ampoules of tranexamic acid intravenously, respectively, while Group 3 serves as the control group, comprising patients who receive any drug but only 250 mg iv saline. Blood loss, edema, surgical visual scale, changes in Hgb and Htc values were evaluated.

Results: A significant reduction in blood loss was observed in the groups receiving tranexamic acid (Group-1 and Group-2) compared to the Group 3 (<0.001). Particularly in Group 3, the average amount of bleeding was 200.0 [100.0-400.0] cc, whereas in Group 1 this amount was recorded as 97.5 [70.0-200.0] cc and in Group-2 it was 85.0 [30.0-200.0]. In postoperative edema measurements, less edema was found in the groups received tranexamic acid, and significant differences on postoperative 3 ($p=0.038$), and 7 ($p=0.003$) were observed. Fromme scale between groups statistically significant (<0.001) and Group 3 had lower visual field scores.

Conclusion: This study demonstrates that tranexamic acid significantly reduces intraoperative bleeding during bimaxillary orthognathic surgery, reduces postoperative swelling and improves the quality of surgical visual field. These findings indicate that tranexamic acid can be effectively used and decrease postoperative complications in orthognathic surgery.

Keywords: orthognathic surgery, tranexamic acid, edema

OP-054

Different Oral Pathological Lesions In Pediatric Patients: Case Series

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Objective: There can be a wide variety and prevalence of oral pathological conditions in children that can differ from adults in terms of symptoms and clinical course. This case presentation aims to raise awareness about the importance of early diagnosis and treatment of oral pathological lesions in pediatric patients. In three patients, two boys and one girl aged between 10 and 14, diagnosed with the radicular cyst, odontogenic keratocyst, and odontogenic myxoma, treatments such as marsupialization, enucleation, and enucleation with the associated impacted tooth were performed based on the size and type of the lesions. Postoperative follow-up of the patients is ongoing. Knowing pediatric oral lesions is crucial for accurate and differential diagnosis. When determining the treatment approach for these lesions in children, factors such as ongoing maxillofacial development, high osteogenic activity, and potential cooperation issues should be taken into consideration.

Case:

Conclusion:

Keywords: Lesion, Oral Pathology, Pediatric

OP-055

Resection in Ameloblastoma Treatment Case Report

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Objective: Ameloblastoma is a benign odontogenic tumor with aggressive growth. It is an epithelial neoplasm originating from the enamel organ, remnants of the dental lamina, the epithelium of an odontogenic cyst, or basal epithelial cells of the oral mucosa. Ameloblastoma accounts for 14% of tumors and cysts in the jaws. It is mostly seen in the posterior region of the mandible. Although the age of occurrence varies according to the type, it is most common in the 2nd-4th decade. It usually presents as a slow-growing, asymptomatic swelling and causes enlargement or perforation of the cortical bone. If left untreated, ameloblastoma can grow to a large size, causing mobility and displacement of teeth and facial deformity. Treatment can be conservative or radical surgery. As a result of radical surgery, mandibular function and aesthetics are tried to be preserved with reconstruction plates.

Case: A 60-year-old patient who presented to our clinic with a swollen mandible was diagnosed with ameloblastoma after biopsy. Due to the size of the lesion, it was decided to resect the affected area and place a reconstruction plate.

Conclusion: The prognosis of ameloblastoma varies depending on the age, type, location and size of the formation, which is directly related to the degree of bone involvement, damage to adjacent structures and the type of surgical intervention (radical or conservative). The recurrence rate is 50-90% after conservative treatment and 10% after radical surgery. Therefore, long-term follow-up is required.

Keywords: Ameloblastoma, Resection treatment, Reconstruction

OP-056 Splitting Advancement Genioplasty

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Objective: A new genioplasty technique has been described and performed on over hundreds patients since 1995. The technique has been developed to avoid undesired results of the current osseous genioplasty techniques and to achieve a more natural appearance in advancement genioplasty. According to the authors' technique, a rectangular part of the outer table of the mentum is split away from the mandible, and is advanced and fixated to the mandible.

Materials-Methods: This technique was performed over hundreds patients with only minor complications including three cases of wound dehiscence and two cases of osteomyelitis, which were managed with antibiotic therapy. Aesthetic results were found to be satisfactory for both author and the patients. When the results were evaluated using pre- and postoperative photos, lip position and projection of the mentum were found to be natural in shape appearance.

Results: When the results were evaluated using pre- and postoperative photos, lip position and projection of the mentum were found to be natural in shape appearance. After the surgery, a new bone formation between the advancement segment and the mandible was demonstrated radiographically.

Conclusion: Advantages of the technique include having more contact surface for bony healing, a natural lower lip, more natural projection of the mentum. Splitting advancement genioplasty is a useful and satisfactory technique for advancement genioplasty. Splitting advancement genioplasty is a more physiological osteotomy technique than most of osseous genioplasty techniques.

Keywords: Genioplasty, Chin Advancement

OP-057

Retrospective Evaluation of Stability of Implants Inserted in Sinus Augmented Sites: 1 Step Versus 2 Step Procedure

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Objective: The aim of this study is to compare the primary and secondary stability of implants inserted in posterior maxilla with 1 stage sinus floor augmentation (Group 1), 2 stage sinus floor augmentation (Group 2) or without sinus floor augmentation (Group 3). Furthermore, the stability values were evaluated regarding subantral bone height in subgroups.

Materials-Methods: 157 implants inserted in posterior maxilla were evaluated retrospectively. Insertion torque (IT) at time of implant insertion, surgeon's tactile sense of primary stability and Implant Stability Quotient (ISQ) measurements at time of insertion, at 4.th months and 6th months were collected. To evaluate the effect of subantral bone on IT and ISQ values, Group 1 and group 2 were subgrouped regarding subantral bone height.

Results: Similar stability values could be obtained in group 1, 2 and 3. When subgroups were evaluated, patients with less than 6 mm subantral bone resulted with significantly lower IT and ISQ values at time of insertion in group 1. ($p=.049$ and $p=.034$ respectively). The patients with less than 2.5 mm subantral bone resulted with significantly higher IT values in group 2. ($p=.043$). There were no significant difference between two augmentation techniques **regarding graft height loss at first year.**

Conclusion: Subantral bone height is a significant factor on primary stability in one staged sinus floor augmentation procedure. In contrast, cases with lower subantral bone resulted with better primary stability in two staged sinus floor augmentation. Bone remodelled on graft could give better stability than native bone on posterior maxilla.

Keywords: primary stability, resonance frequency analysis, sinus lift

OP-058

Severe Bradycardia Cases Encountered During Temporomandibular Joint Arthrocentesis: Presentation of Two Cases

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Objective: Arthrocentesis of the temporomandibular joint (TMJ) is a low-cost, minimally invasive procedure frequently used for management of certain TMJ disorders. As well as common complications such as infection, perforation of the external auditory canal, extravasation of fluid into soft tissues and TMJ cartilage damage, bradycardia may also develop as a very rare complication during this procedure. This paper discusses two cases of severe bradycardia encountered during TMJ arthrocentesis.

Cases: Two patients underwent arthrocentesis procedure under general anesthesia. In the first case, who was a 35-year-old male, the pulse dropped from 62 to 35 beats per minute during the lavage. After administering 1 mg of intravenous atropine, the pulse returned to normal. In the second case, a 47-year-old female patient with controlled hypertension experienced a drop in pulse from 75 to 32 beats per minute during the lavage. Upon no response to 1 mg of intravenous atropine, 0.00001 mg of intravenous adrenaline was administered and the pulse returned to normal. The procedures were completed without any further complications in both patients.

Conclusion: Bradycardia is a serious complication that can lead to asystole or even death. The possible mechanism of this complication may be explained by the pressure and pain occurred during the lavage which may lead to stimulation of vascular and neural structures in TMJ region. It is of utmost importance to closely monitor the patient's heart rate and other vital signs during the arthrocentesis for a potential bradycardia.

Keywords: arthrocentesis, bradycardia, temporomandibular joint

OP-060

Innovative Approach to Nasotracheal Intubation by Fiberoptic Bronchoscopy

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Objective: The management of difficult airways has always been a challenging issue in anesthesia practice. Among the various specialized tools, fiberoptic bronchoscopy (FOB) emerges as the only option especially in patients with limited mouth opening, Therefore, the ability to use FOB quickly and effectively becomes crucial.

Case: A 39-year-old male patient with TMJ ankylosis developed following a previous trauma was scheduled for bilateral gap arthroplasty. As direct laryngoscopy or videolaryngoscopy was not possible due to the restricted mouth opening, nasotracheal intubation with the aid of FOB was planned. Unlike the conventional method which includes the introducing the bronchoscope first and then the intubation tube, a modified method was performed in an attempt to minimize the contact with blood and secretions. In this case, the intubation tube was first passed through the nasal cavity in a controlled manner, then, the tube was used as a guide to advance the FOB through the nasal cavity.

Conclusion: Passing the endotracheal tube through the nasal cavity before FOB may provide a faster and more effective intubation in cases with difficult airways.

Keywords: ankylosis, difficult airway, fiberoptic bronchoscopy

OP-061

Prospective Evaluation of Minimally Invasive versus Conventional Le Fort I Osteotomy: Preliminary Results

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Objective: The aim of this study is to evaluate the effect of minimally invasive Le Fort I osteotomy on intraoperative parameters and postoperative morbidity.

Materials-Methods: This randomized clinical trial was conducted on patients who underwent Le Fort I osteotomy for the correction of maxillofacial deformities at the Erciyes University Department of Oral and Maxillofacial Surgery. The primary predictor variable was the type of Le Fort I osteotomy, with one group undergoing minimally invasive and the other conventional osteotomy. The main study outcomes were surgical time, bleeding, postoperative edema, and pain. Surgical time and bleeding were recorded in minutes and milliliters, respectively, from the beginning of the incision in the maxilla to the last suture. Postoperative edema was evaluated on days 1, 7, and 14, as well as at 3 months, using 3dMD Vultus software. Postoperative pain was measured using the Visual Analog Scale.

Results: This study included 20 patients. 10 were operated with minimally invasive and 10 were operated with conventional osteotomy. There was no statistically significant difference between the groups in terms of age, gender, and postoperative pain. However, there was a statistically significant difference between the groups in terms of surgical time ($p=0.009$), amount of bleeding ($p=0.009$), and postoperative edema ($p<0.005$).

Conclusion: Minimally invasive Le Fort I osteotomy seems to be a reliable method that reduces morbidity compared to conventional osteotomy.

Keywords: minimally invasive, Le Fort I osteotomy

OP-062 Amyloidosis

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Objective: Amyloidosis is a disease characterized by the accumulation of extracellular amyloid protein in many different tissues and organs, with localized or systemic symptoms. It can be acquired or inherited. Amyloid can accumulate in the liver, spleen, kidney, heart, nerves and blood vessels, causing different clinical syndromes such as cardiomyopathy, hepatomegaly, proteinuria, macroglossia, ecchymoses, neuropathy, renal failure, hypertension, autonomic dysfunctions and corneal abnormalities.

Case: In this case report, we present a 70-year-old male patient who presented to our clinic with dysphagia due to macroglossia for 2 years and had no other symptoms.

Conclusion: All tests were performed and multiple myeloma was diagnosed. Drug treatment was started in consultation with the rheumatology clinic.

Keywords: Amyloidosis, Macroglossia, Multiple Myeloma

OP-063

Extraction Of A Tooth Root From The Oronasal Region With The Assistance Of Endoscopic Imaging

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Objective: During tooth extraction, improper and opposing forces can result in the displacement of a portion or the entire tooth to different anatomical regions, potentially leading to complications. For maxillary premolar and molar teeth, this often leads to displacement into the maxillary sinus or, rarely, the infratemporal fossa. In the anterior maxilla, incisor and canine teeth may migrate into the nasal cavity. This case report describes the extraction of a maxillary canine root from the nasopharyngeal region.

Case: During the extraction of the impacted right maxillary canine tooth in a 60-year-old male patient under local anesthesia, the apical third of the root penetrated the nasal mucosa, displacing into the oronasal region. After localization of the tooth root with CBCT, the patient underwent surgery under general anesthesia the following day. Using an endoscopic camera inserted through the right nasal cavity, the location of the root was determined. With the assistance of a transnasally advanced throat pack, the root was dropped into the oral cavity and retrieved. No complications were encountered during the patient's postoperative follow-up.

Conclusion: In order to prevent potential complications during the extraction of teeth adjacent to anatomical structures, careful attention must be paid. Having the extraction performed by experienced surgeons and conducting detailed radiographic evaluations prior to the procedure will minimize potential risks.

Keywords: complication, impacted tooth, transnasal approach

OP-064

Surgical Protocol of Patients Referred to the Oral and Maxillofacial Surgery Clinic for Dental Evaluation Before Bisphosphonate Treatment

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Objective: Bisphosphonates are widely used to treat patients with osteoporosis, multiple myeloma, and bone metastatic cancer. Bisphosphonate-related osteonecrosis of the jaw (BRONJ) has been a rare but major complication of this therapy. Most patients with BRONJ undergo dental procedures during treatment with antiresorptive agents. However, BRONJ may also occur spontaneously. Patients that are referred to our clinic before treatment are evaluated to prevent BRONJ.

Case: 5 patients that are planned to take bisphosphonate treatment and referred to our clinic for surgical examination before taking the medication. Patients were evaluated for acute conditions and dental problems that could cause the need of treatment in the long term. Periodontal treatment followed by extracting the teeth under antibiotherapy with primarily closing the wounds and endodontic treatments are done if necessary. Treating these conditions with proper surgical approach and giving them instructions about proper oral hygiene with periodontal treatment before the bisphosphonate use is key to prevent BRONJ.

Conclusion: Bisphosphonate-related osteonecrosis of the jaw (BRONJ) is a severe complication in patients who use bisphosphonates. These cases highlight the importance of evaluating patients before the usage of bisphosphonates and preventing BRONJ. It is important for these patients to be evaluated and treated multidisciplinary.

Keywords: Bisphosphonates, Oral Examination, Osteonecrosis of the Jaw

OP-065

The Effect of Two Different Haemostatic Sponges on Tooth Extraction Socket Healing: An Experimental Study in Rats

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Objective: This study aimed to compare the effects of haemostatic sponge and collagen sponge placed in the extraction socket after tooth extraction on the healing process, radiologically and immunohistochemically.

Materials-Methods: Female Wistar albino rats were utilized in this study. Using a split-mouth design, rats underwent first and second molar extractions on the right and left sides. Haemostatic sponge was placed in the tooth extraction socket on the right side, while collagen sponge was placed on the left side. After 8 weeks, the rats were sacrificed, and samples were examined radiologically and immunohistochemically.

Results: Fourteen rats were included in the study. Micro-CT examination revealed higher values of soft tissue volume (TV), bone volume (BV), percent bone volume (BV/TV) and trabecular thickness (TbTh) on the right side. This difference was statistically significant. Bone mineral density (BMD) value was statistically significantly higher on the left side. In the immunohistochemical examination, RANKL expression levels were significantly higher on the right side. VGFR expression level was higher on the right side, but the difference was not statistically significant. OPG expression level was similar on both sides.

Conclusion: Our study shows that tooth extraction sockets placed with haemostatic sponge exhibit increased bone volume, whereas sockets placed with collagen sponge exhibit more dense bone. Considering that haemostatic sponge is more affordable and more accessible, it can be used to enhance the healing of extraction sockets.

Keywords: extraction socket healing, haemostatic sponge

OP-066

Giant Peripheral Odontogenic Myxoma in Palate

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The World Health Organization defined Odontogenic Myxoma (OM) as a benign mesenchymal odontogenic tumor in 2017. OM is an uncommon, and locally aggressive tumor of the jaws. They are classified into two groups: Central and Peripheral.

Central OM is an intraosseous neoplasm. It is more frequently seen in the mandibula than maxilla. Clinically it shows an asymptomatic slowly growing swelling and mostly detected incidentally during radiographic examination. Radiographically, Central OM exhibits various manifestations such as unilocular or multilocular lobes with well defined or ill defined borders.

Peripheral OM is considered the extra-osseous type of OM. It is remarkably rare and exhibits significantly less aggressiveness compare to Central OM. Peripheral OM is also a slow-growing tumor with a lower recurrence rate comparing to central counterpart. Clinically it usually presents as painless and exophytic gingival mass, resulting in a slowly-growing swelling. The overlying epithelium is typically remains unaffected and there is no bone involment.

Here, we present an uncommon case of primary giant Peripheral OM occurring in the palatal region of a 27-years-old male patient. The patient's medical and dental histories were unremarkable. There was a history of long-term oral corticosteroid use for bodybuilding. He complained of an asymptomatic mass that had appeared in the palate for the last 3 years. Surgical excisional of the lesion was performed under local anesthesia and sedation. After achieving hemostasis, post-op instructions were given to the patient. In histopathological evaluation, the tumor was composed of fibroblast and collagen fibers that are embedded in myxoid stroma.

Keywords: Odontogenic myxoma, Peripheral odontogenic myxoma, Soft tissue myxoma

OP-067

Effect of Nasotracheal Intubation on Nostril Width With/Without Cinch Suture

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Objective: Unpredictable widening of the nasal base after Le Fort 1 osteotomy is a challenging situation. Alar cinch suture has been described in the literature to prevent expansion of the nasal base. The aim of this study is to evaluate whether nostril symmetry is affected by intubation side in patients with cinch sutures after lefort osteotomy.

Materials-Methods: This retrospective study was performed at the department of Oral and Maxillofacial Surgery of the Erciyes University Faculty of Dentistry. Among 612 patients who had Lefort 1 osteotomy with nasotracheal intubation (NTI) between 2017 and 2023, 92 patients were included in the study. Two groups were evaluated, group 1(n:47) patients who underwent conventional lefort1 osteotomy (CLF1O) with cinch suture, group 2(n:45) patients who underwent CLF1O without any additional modification. Soft tissue changes after surgery were assessed by comparing the 3D data of the nasolabial area before surgery and at 6 months. The side of intubation was also noted from surgery.

Results: In cinch group at LNTI, both sides showed no difference (p:0,122 for LNW, p:0,674 for RNW). In cinch group at RNTI, both sides showed significant difference. (p:0,038 for LNW, p:0,010 for RNW).

Conclusion: It is a known fact that cinch suture is effective in alar base reduction after maxillary advancement and impaction surgeries. This is the first study in the literature to show that nostril symmetry after cinch suture is affected by intubation side. Therefore, maxillofacial surgeons may consider alar cinch suturing after extubation to prevent asymmetry.

Keywords: cinch suture, lefort 1 osteotomy, nostril width

OP-068

Mandibular Odontogenic Fibromyxoma in a Five-Year-Old Child: A Case Report

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Objective: Odontogenic fibromyxomas are rare benign odontogenic tumours of mesenchymal origin, especially in children. The most common clinical findings are slow-growing painless swellings, bone growth, pain and tooth displacement. Surgical excision is the first choice method. In this report, we aimed to draw attention to a rare case of odontogenic fibromyxoma in children.

Case: A five-year-old boy was brought to our clinic by his family with complaints of pain and swelling under the right mandible. In the radiographic evaluation of the patient, measuring 25 x 18 x 21 mm, well-circumscribed multilocular, expansive, radiolucent lesion was detected in the posterior aspect of the right mandible corpus. An incisional biopsy was taken from the bone covering the lesion and the underlying lesion by intraoral approach. Histopathological examination of the biopsy revealed odontogenic fibromyxoma. Under general anesthesia, a gray-white, solid tissue mass and accompanying bony tissues were removed from the right submandibular region using an extraoral approach to avoid damage to the tooth germs and because the lesion was localized to the basis mandible. The patient was followed up postoperatively. No complication developed, necessary medications were prescribed, the patient was discharged and follow-up was recommended.

Conclusion: Odontogenic fibromyxoma is a rare odontogenic tumor in children. Clinically, they can often be confused with abscesses, cysts and other tumoral formations. The trabecular structures in the jaw bones should be carefully examined on radiographs in every patient. Painful or painless swelling of the jaw bones, displacement of teeth should be evaluated for the presence of odontogenic tumours.

Keywords: odontogenic myxofibroma, odontogenic tumors, oral pathology

OP-069 Severe Bleeding Of the Maxillary Artery During Ankylosis Surgery

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Objective: The primary goal of temporomandibular joint (TMJ) ankylosis surgery is to provide inter-incisal opening, restore proper jaw function, and improve the patient's quality of life. As with any surgical procedure, there are risks and possible complications.

Case: A 26-year-old male patient applied to our clinic due to restricted mouth opening (5mm). Patient history revealed that he had an accident 1,5 years ago and underwent several surgeries except TMJ. CBCT examination showed a mass in 11mm dimensions. Patient underwent general anesthesia for removal of the anklyotic mass. After removal of 2/3 cranial part of the mass, a sagittal peizoincision was made through the junction between ramus and the mass and a massive bleeding occurred from the medial site of the ramus. Surgery immediately stopped and the gap was filled with sterile gauzes and pressure was applied, however maxillary artery kept bleeding. Two syringes of fibrin hemostatic agent (Surgiflo) was applied with pressured gauze and artery was caught randomly with a clamp. Artery clamps were placed and bleeding was checked. Surgical area was closed with vicryl suture and patient was referred to interventional radiology and confirmed total blockage of the maxillary artery. After 3 days of hospital stay, patient discharged from the hospital with 20 mm mouth opening.

Conclusion: In case of removal of a large anklyotic mass from TMJ, preoperative embolization of the internal maxillary artery should be preferred as a protective and effective treatment approach.

Keywords: TMJ, ANKYLOSİS, BLEEDİNG

OP-070

Reliability of AI-assisted Chatbots for Jaw Pathology Diagnosis

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With the revolving technology, AI-driven tools have been increasingly integrated to dental practices in various aspects as diagnosis, treatment planning, and patient care. In this study, we are aiming to use a subdivision of AI systems which is Narrow AI to analyze the accuracy of artificial intelligence in finding differential diagnosis and a provisional diagnosis of jaw pathologies. The main significance of this study is to obtain an accuracy percentage from the answers of 3 AI-assisted chatbot platforms; ChatGPT 3.5 (by OpenAI), Copilot (by Microsoft) and Gemini (by Google), to show the reliability of the help that AI-assisted chatbots can give to dentists. We evaluated 58 panoramic films with certain pathology diagnosis and created a written statement based on 11 criteria under 3 main categories. We asked these 58 cases to both 3 AI-assisted chatbots mentioned above and a group of Oral and Maxillofacial Surgeons of 3, and a group of Oral and Maxillofacial PhD assistants of 3. When the answers to the cases evaluated between groups, it's found that AI has a great accuracy rate in finding differential diagnosis and a provisional diagnosis of jaw pathologies, moreover the usage in clinic should be investigated further and the data gathered from AI should always be doublechecked by a specialist.

Keywords: AI chatbots, Jaw pathologies, AI-assisted diagnosis

OP-071

Comparison of Marginal Bone Loss Between Titanium and Titanium Zirconium Implants, 5 year Follow Up

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Objective: Titanium (Ti) is the leading material in the implant dentistry for the treatment of either partial or full edentulism. More recently, Titanium Zirconium (TiZr) alloy has been developed for more demanding clinical conditions, as it shows greater mechanical and biological features than commercially pure Ti Grade 4.

Survival of dental implants is based on the relationship between implant and oral tissues. Marginal bone level stability around implants has been used as one of the main criteria for implant success. Implant failures are often associated with implant mobility due to marginal bone loss.

The aim of this study was to compare titanium and titanium-zirconium implants' marginal bone loss values which were at function more than 5 years.

Materials-Methods: The aim of this study was to compare titanium and titanium-zirconium implants' marginal bone loss values which were at function more than 5 years. Titanium and 13-17 % Zr containing titanium-zirconium (TiZr) alloy implants included in this study. 80 implants (40 titanium, 40 titanium zirconium) made in 39 patients at Başkent University Oral and Maxillofacial Surgery Department were included. Marginal bone loss measurements were performed digitally in computer software programme.

Results: TiZr alloy implants showed less marginal bone loss compared to traditional titanium implants but this difference statistically not significant.

Conclusion: Titanium-zirconium alloy may be the dominant material in implant material choice in order to increase clinical implant success.

Keywords: Titanium Implants, Titanium-Zirconium Implants, Marginal Bone Loss

OP-072

Comparison of The Diagnostic Success of Panoramic X-Rays Compared to Dental Volumetric Tomographies in The Relationship between Mandibular Third Molar Teeth and The Mandibular Canal

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Objective: Evaluating the relationship between third molar roots and the mandibular canal challenges clinicians in settings where dental volumetric tomography is inaccessible. In this study, we wanted to investigate the diagnostic power of panoramic X-rays in superposed teeth. The sensitivity, specificity, and negative and positive predictive values of panoramic radiography in detecting the relationship between superposed wisdom tooth roots and mandibular canal.

Materials-Methods: We included 20 doctorate students who completed one year at Istanbul Kent University in the study. We asked the doctorate students about the relationship between the mandibular canal and third molar roots in panoramic X-ray images. A radiologist and a professor evaluated the dental volumetric tomography images. We investigated the diagnostic adequacy of panoramic X-rays in superposed teeth.

Results: We included 37 teeth images in the study and asked the doctorate students separately. The mutual opinion of the radiologist and the faculty member on the dental volumetric tomography image was accepted as the gold standard. We randomly selected 21 superposed and 16 non-superposed X-rays. Considering the evaluations made according to the graph, true positives were 200, false positives 120, true negatives 305, and false negatives 115. The accuracy of reading the graphs was 68.2%. According to these results, the sensitivity of panoramic radiography was 63.5% (95%CI: 57.9-68.8), and the specificity was 71.8% (95%CI: 67.2-76.0). The positive predictive value was 62.5%, while the negative predictive value was 72.6%.

Conclusion: The diagnostic value of panoramic X-rays in superposed teeth is below 80%, but more studies are needed to detect the accurate diagnostic power.

Keywords: superposition, panoramic xray, dental volumetrik tomography

OP-073

Comparison of Psychosocial Profile in Patient with Acute and Chronic Temporomandibular Disc Displacement Without Reduction

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Objective: This study was conducted to compare the psychosocial status of patients with acute and chronic temporomandibular joint (TMJ) disc displacement without reduction (DDwoR), aiming to emphasize the impact of psychosocial factors on the course of the disease and the importance in treatment selection.

Materials-Methods: Seventy-five patients who presented to the Department of Oral and Maxillofacial Surgery at Ondokuz Mayıs University Faculty of Dentistry with temporomandibular disorders (TMD) complaints were included in this prospective clinical study. Three groups were formed, including patients with acute DDwoR of TMJ, chronic DDwoR of TMJ (≥ 3 months duration of symptoms), and a healthy control group ($n=25$). Patients were evaluated using Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) forms, Pain Catastrophizing Scale (PCS), and Tampa Scale of Kinesiophobia for Temporomandibular Disorders (TSK-TMD).

Results: Elevated levels of anxiety, somatization, functional limitation, parafunctional habits, kinesiophobia, and pain catastrophizing were noted in both acute and chronic DDwoR groups compared to healthy subjects. ($p<0,001$) Significantly higher pain intensity and negative psychological scores were observed in acute group in comparison to the chronic group. ($p<0,001$)

Conclusion: The psychosocial profile of patients with TMD pain should be considered in the diagnosis and the treatment, given that it could have a substantial impact on pain persistence and TMD treatment response. In this respect, DC/TMD and other reliable questionnaires could be used to assist clinicians, without specific training in mental health, to identify patients with depression and anxiety.

Keywords: DC/TMD, psychosocial profile, temporomandibular disease

OP-074

Investigation of The Effects of Circadian Rhythm on Post Operative Patient Comfort in Patients Who Had Employed Third Molar Tooth Extraction Under Local Anesthesia

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Objective: The aim of this study was to evaluate the effects of circadian rhythm on the amount of pain, trismus and oedema after surgery of impacted third molars of the lower jaw at certain times of the day in patients who applied to the Oral, Dental and Maxillofacial Surgery Clinic of Dicle University Faculty of Dentistry.

Materials-Methods: In our study, 3 different patient groups were formed. Group 1 patients were operated at 08:30 in the morning, Group 2 patients were operated at 11:30 in the afternoon and Group 3 patients were operated at 15:30 in the afternoon. Preoperative and postoperative pain, oedema and trismus data of the patients were recorded and evaluations between the groups were made statistically.

Results: Studies have shown that parameters that have an effect on healing such as body temperature, cortisol and melatonin show quantitative differences according to the hours of the day. In the studies, it has been reported that reactants such as melatonin and cortisol, which are effective on the immune system, are high in the early hours of the day and decrease in the afternoon and evening hours.

Conclusion: As a result of our study, post operative pain, oedema and trismus were observed in all patients who underwent extraction of impacted wisdom teeth regardless of the groups. In the intergroup evaluation, more pain, oedema and trismus values were recorded in Group 3 compared to Group 1 and Group 2. Although there were small differences between Group 1 and Group 2, they were not statistically significant.

Keywords: circadian rhythm, oral surgery

OP-075

Investigation of The Effects of Recombinant NELL-1 Protein and Pentoxifylline on New Bone Formation in Rabbit Maxillary Sinus Floor Elevation

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Objective: Deporteinized bone matrix(DBM) is an osteoconductive graft material used in maxillary sinus augmentation(MSA).The new bone formation can take 6-12 months when DBB is used.Therefore alternative methods are needed to increase bone formation and shorten treatment duration.Nell-1,a transmembrane glycoprotein, has been discovered to accelerate bone cell proliferation and new bone formation. Pentoxifylline(PTX),known as phosphodiesterase inhibitor, decreases bone destruction by increasing intracellular energy. The aim of this study was to investigate the effects of recombinant Nell-1 protein and PTX,on the new bone formation, bone resorption and bone quality in MSA.

Materials-Methods: Chitosan-based nanoparticles releasing NELL-1 and PTX were developed. The nanoparticles were applied to MSA surgery in an in-vivo rabbit model. The subjects were divided into six groups:Nell-1(0.3mg/ml)group, systemic PTX(25mg/kg/day)group, local PTX(25mg/ml)group, Nell-1+systemic PTX(0.3mg/ml+25mg/kg/day)group, Nell-1+Local PTX(0.3mg/ml+25mg/ml)group and control group.MSA surgeries were performed and bone samples were evaluated by histological and micro CT.

Results: It was observed that in all experimental groups, the agents applied in addition to the bone graft increased new bone formation compared to the control group.Considering the new bone volume values, the values obtained in Nell-1 group were statistically significantly higher($p<0.001$).In total porosity values, the porosity percentage was significantly lowest in the subjects who received systemic PTX.The difference between Nell-1+Local PTX group and Nell-1 group in terms of trabecular number and trabecular thickness was statistically significant($p>0.005$).

Conclusion: Nell-1 and PTX have been successfully bound to chitosan. Nell-1 and PTX loaded nanoparticles can be used in new bone formation in MSA. The combination of local Nell-1 and systemic PTX is more effective in MSA.

Keywords: Maxillary Sinus Augmentation, Nell-1, Pentoxifylline

OP-076

Impact of Nasal Floor Augmentation on Nasal Passage Volume and Breathing Function: A Retrospective Study

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Objective: Nasal floor augmentation is an effective method in patients with severe atrophic maxilla along with sinus lifting prior to dental implant placement. The aim of the study to evaluate the effects of nasal floor augmentation on nasal passage volume and breathing function.

Materials-Methods: The clinical and radiographic records of patients who underwent maxillary augmentation including nasal floor elevation with iliac crest bone grafts at Bezmialem Vakif University Faculty of Dentistry between 2018-2023 were retrospectively analyzed. The bone height gain and nasal passage volume changes were measured by constructing pre- and postoperative three-dimensional models of anterior maxilla and nasal passage using Mimics software (Materialise, Belgium; v21). Subjective perception of nasal passage was measured using the Nasal Obstruction Symptom Evaluation (NOSE) scale.

Results: Twelve patients (8 female, 4 male; mean age: 55.6±10.4 years) were included in the study. The mean duration between nasal floor augmentation and implant placement was 8.0±5.2 months. No implant loss was observed. All patients were rehabilitated with implant-supported fixed prostheses. In one of the patients, despite an increase in average bone height observed, there was a decrease in nasal passage volume. In the other eleven patients, the mean reduction of the nasal passage volume was 2838.54±2306.52 mm³. The mean increase of bone height was 5.71±3.59 mm. The mean postoperative NOSE score was 19.5±25.4. A clinical correlation between the NOSE score and the nasal passage volume alteration was observed.

Conclusion: Surgeons should be wary of overaugmenting the nasal floor to avoid compromising nasal airway function.

Keywords: Bone augmentation, nasal floor elevation, dental implant

OP-077

What Is The Power Of Low-Level Laser Therapy? Or Is There Any Power?

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Objective: Orthognathic surgery is often associated with postoperative inflammatory symptoms such as pain, edema and restricted mouth opening. Non-pharmacological therapies have been proposed to minimize inflammatory symptoms, such as cryotherapy and laser. Among these methods, low-level laser therapy (LLLT) has anti-inflammatory effects and is used in several medical treatments, including orthognathic surgery. The results of the effects of laser therapy after orthognathic surgery are controversial and there is no standardisation regarding the protocols to be used. Therefore, this study aimed to compare the effects of LLLT on postoperative pain, oedema and trismus perception after orthognathic surgery.

Materials-Methods: Our study was conducted using 30 patients, who were divided into a study group (n=15) and control group (n=15). LLLT was performed on the study group at the immediately, 24th hour, 48th hour, 72nd hour, and 7th day postoperatively. LLLT was not performed in the control group. Edema and the mouth opening measurements of the patients were measured on the 3rd day, 7th day, 15th day, 30th day and 6th month.

Results: There was no statistically significant difference in edema measurements between the laser group and the control group ($p>0,05$). There was a statistically significant difference between the two groups in mouth opening measurements at 30th day and 6th month ($p<0,05$). It is seen that the mouth opening measurements of those in the laser group were higher than those in the control group.

Conclusion: As observed in most analyses, there were increases in values for mouth opening no significant differences in the occurrence of edema.

Keywords: Edema, Low-Level Laser Therapy, Orthognathic Surgery

OP-078

Hyoid Bone Position Following Bimaxillary Surgery and It's Impact on Pharyngeal Airway

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Objective: As orthognathic procedures are fundamentally functional surgeries, it is important to understand their impact on the pharyngeal area, especially in cases requiring mandibular setback. The purpose of the current study was to examine the effects of bimaxillary surgeries, with or without concomitant genioplasty, on the position of the hyoid bone and pharyngeal airways.

Materials-Methods: 43 patients who had bimaxillary surgery to correct skeletal class III deformity were included and grouped according to whether they had undergone genioplasty. CBCT images were used to compare airway spaces pre-and post-surgery. The study evaluated volumes of oropharyngeal, nasopharyngeal, hypopharyngeal, and total pharyngeal spaces, along with the minimum axial space of the pharynx and linear measurements pertaining to the position of the hyoid bone.

Results: Both groups showed a significant increase in nasopharyngeal volume (NPV) ($p<0.05$). An significant increment in hypopharyngeal volume (HPV) was observed only in patients who had undergone genioplasty. The measurements to determine the position of the hyoid bone revealed a significant difference only in the distance between the hyoid bone and retrognathion ($p<0.05$) in the genioplasty group.

Conclusion: The current study revealed a slight decrease in the volume of the pharynx, with no statistical difference. Adjunctive genioplasty increased the hypopharyngeal volume (HPV) and was useful for suspending the effect of a mandibular setback on lower parts of the airways. On the other hand, even the tendency to posteroinferior displacement after setback, the position of the hyoid bone with the pharyngeal area was found to be statistically stable.

Keywords: genioplasty, airway space, skeletal class III deformity

OP-080

Knowledge, Awareness, and Attitude among Practicing Oral and Maxillofacial Surgeons on Tele-dentistry.: A Cross-Sectional Survey

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Objective: Tele-dentistry is a telemedicine practice that uses telecommunications and technology. The aim of this study is to evaluate the knowledge, awareness, and attitudes of oral and maxillofacial surgeons on tele-dentistry.

Materials-Methods: This survey-based cross-sectional study was conducted among dentists working in the field of oral and maxillofacial surgery (OMFS) in Turkey, who are research assistants, specialists, doctor faculty members, associate professors and professors. A 26-question survey was sent to participants online via Google Forms. The survey includes questions assessing knowledge, awareness, and attitudes towards tele-dentistry. Data were analyzed statistically and $p < 0.05$ was considered significant.

Results: A total of 152 dentists working in the field of OMFS, including 70 research assistants, 31 specialists, 20 doctoral faculty members, 19 associate professors, and 12 professors, participated in the study. While the rate of participants who have heard of tele-dentistry is 46.1%, the rate of participants who use tele-dentistry is 9.9%. The rate of those who think that tele-dentistry can be used in OMFS is 42.1%. There is a statistically significant difference between hearing about tele-dentistry and using tele-dentistry. ($p < 0.001$). A statistically significant difference was found between having heard of tele-dentistry, using it, and considering using it in the future, and age and title ($p < 0.001$).

Conclusion: It has been determined that the knowledge, awareness, and attitudes of OMFS practitioners in Turkey regarding tele-dentistry are at an acceptable level but they have demonstrated relatively poor practice. Additionally, it has been observed that there are still some concerns and uncertainties about tele-dentistry.

Keywords: knowledge, oral and maxillofacial surgery, teledentistry

OP-081

Tunneled Supraclavicular Island Flap for Reconstruction of Facial Defect: A Case Report

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Objective: Reconstructive procedures in the head and neck region use a wide range of flaps for defect closure. These methods include local flaps, myocutaneous flaps, skin grafts and free microsurgical flaps to ensure a satisfactory functional and aesthetic result. Moreover, the donor site defect must be closed with as little functional and aesthetic impairment as possible. This report presented the surgical treatment of mandibular soft tissue defect with a tunneled supraclavicular island flap.

Case: A 43-year-old male patient was admitted to our hospital for repair of the mandibular soft tissue defect and facial asymmetry. His past medical history included the resection of the right mandible due to squamous cell carcinoma, reconstruction with the iliac graft, adjuvant radiotherapy and chemotherapy. A tunneled supraclavicular island flap was used to close the mandibular soft tissue defect. After 2 months, the tunneled flap was separated from the shoulder and both mandibular soft tissue defect and aesthetically impaired regions were repaired with the flap.

Conclusion: One month follow up reveals successful healing of the soft tissue defect. The shoulder provides a relatively good skin texture and match to provide cover and lining for defects in the lower part of the face, in combination with minor donor site morbidity.

Keywords: facial defect, reconstruction, supraclavicular flap

OP-082

Investigation Of The Effect Of The Newly Developed Head-Neck Surgery Position Set On Surgical Success And Patient Position-Related Complications

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Objective: Patient position during orthognathic surgery is a factor affecting surgeon satisfaction and associated surgical success, and the frequency of postoperative complications. A new "head and neck position set" was developed to prevent damage to the anesthesia circuit and to prevent compression-related complications during orthognathic surgery. The aim of this study is to investigate the effects of this set on surgical success and complications.

Materials-Methods: Patients who underwent orthognathic surgery were included in the study, and the patients were randomly divided into Group I (Control, n=20) and Group II (Study, n=20). Traditional methods were used in the control group, and a newly developed head-neck position set was used in the study group.

Results: The time to start surgery (min) values were lower in the study group ($p<0.001$). While surgeon satisfaction was similar between groups ($p>0.05$), anesthesiologist satisfaction was higher in the study group ($p=0.01$). There was no statistically difference between the groups regards to endotracheal tube siniffing level ($p=0.086$). While there was no difference between the groups in terms of postoperative complications ($p>0.05$), sore throat was higher in the control group ($p=0.016$).

Conclusion: The newly developed "Head and Neck Surgery Position Set" did not change surgeon satisfaction, but increased anesthetist satisfaction, shortened the time to start surgery, and reduced the complication of postoperative sore throat. Further clinical studies are needed to obtain more definitive results.

Keywords: anesthesia, ortognathic surgery, patient position

OP-083

Role Of Oropharyngeal Throat Pack On Avoiding a Serious Complication: a Case Report

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Objective: The oropharyngeal throat pack is commonly used in oral and maxillofacial surgeries under general anesthesia despite debated evidence regarding its barrier function. It is used as a physical barrier for prevention of aspiration and ingestion of blood and surgical materials and helping to reduce postoperative nausea and vomiting. On the otherside the use of throat pack has been associated with complications such as postoperative throat pain, mucosal damage and retention of the throat pack.

Case: In this case report, prevention of one of these complications in a 23 year old patient during orthognathic surgery was presented. Loosening of an orthodontic spur material was detected after Le fort I osteotomy and downfracture of the maxilla. After intraoperative imaging obtained with C arm portable x-ray scopy, displaced material was found attached to the throat pack at the base of the tongue.

Conclusion: The routine use of throat pack in oral and maxillofacial surgery remains controversial. Weighing benefits and risks for each procedure is suggested in the evidence based practice.

Keywords: Throat Pack, Orthognathic Surgery

OP-084

Effects of Analgesics Applied During Orthognathic Surgery on Postoperative Pain

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Objective: Orthognathic surgery is generally performed to correct malocclusions caused by skeletal incompatibilities. Pain occurring in the postoperative period after orthognathic surgery operations greatly affects patient comfort. Various analgesic medications are used to manage pain in the postoperative period. Opioid analgesics and NSAIDs are the most commonly preferred drugs to control pain. This study aimed to compare the effectiveness of intraoperative use of contramal and aldolan in relieving pain, which is one of the most important complications that develop after orthognathic surgery and negatively affects patient comfort.

Materials-Methods: Our study included 40 patients who applied to Suleyman Demirel University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery and who were indicated for bimaxillary surgery after clinical and radiological examination. VAS (Visual Analogue Scale) was used to evaluate the effects of intraoperative use of the 2 drugs used in our research on postoperative pain. The results were evaluated statistically.

Results and Conclusion: In our study, statistically significant differences were found as a result of the analysis between the groups. It was determined that intraoperative contramal use showed higher pain scores at certain hours compared to intraoperative aldolan use, and intraoperative aldolan use received higher satisfaction scores by patients. Intraoperative drug administration significantly reduced the pain occurring in the postoperative period. In light of this information, we think that preventive analgesic application before maxillofacial surgeries will reduce the analgesic requirement in the postoperative period and increase patient comfort.

Keywords: Opioid, Orthognathic Surgery, VAS

OP-085

The Effect of Monocular and Binocular Perception on Parallelism in Implant Surgery A Preliminary Study

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Objective: Despite receiving visual input from both eyes, the brain predominantly relies on and utilizes the image from one eye, known as the dominant eye. The dominant eye is inherently preferred for activities that need the use of only one eye, such as looking through a keyhole, pointing a gun, or using a microscope. The aim of this study is to assess the impact of dominant monocular and binocular perception on the alignment of closely placed implants.

Materials&Methods: A total of twenty acrylic mandible models were positioned to simulate real patient conditions, with ten oral surgeons preparing two implant sockets on the right side of the mandible following certain instructions. Each surgeon aimed to achieve parallelism with dominant monocular vision on one model and binocular vision on another. The dominant eye was determined using the Rosenbach method. After preparing the implant sockets, a parallel pin was placed, and cone beam computed tomography was performed. The tomographic slices were superimposed to document the buccolingual and mesiodistal inclinations of the parallel pins.

Results: There was no statistically significant difference in the buccolingual and mesiodistal angulations of implant sockets prepared with monocular versus binocular vision ($p=0.235$, $p=0.715$). The mean angles for monocularly prepared sockets were $3.65^\circ \pm 3.67$ in the buccolingual direction and $1.53^\circ \pm 1.01$ in the mesiodistal direction, while for binocularly prepared sockets, they were $1.97^\circ \pm 1.09$ and $1.75^\circ \pm 1.53$, respectively.

Conclusion: The study suggests aligning buccolingual angulation with binocular vision and mesiodistal angulation with dominant monocular vision during implant socket preparation may improve clinical accuracy.

Keywords: Dental implant, implant parallelism, monocular & binocular perception

OP-086

Investigation of the Stress Strength of Different Subperiosteal Implant Designs Applied to Atrophic and Edentulous Mandible Under Trauma Forces- A Pilot Study

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Objective: As the elderly population increases, so does the problem of alveolar bone resorption. This makes subperiosteal implant (SPI) applications an essential option for treating atrophic and edentulous mandibles. With advanced age, there is a higher risk of facial trauma, and the mandible is one of the most commonly fractured bones after maxillofacial trauma. Therefore, it is crucial to consider the relationship between implant designs and trauma when treating atrophic mandibles. This study compares the stress distribution during facial trauma between different SPI designs in atrophic and edentulous mandibles.

Materials-Methods: Four different models (M) of atrophic and edentulous mandibles were created using finite element analysis. The first model was a one-piece titanium SPI, the second a three-piece titanium SPI, the third a one-piece PEEK SPI, and the fourth a three-piece PEEK SPI. In each model, a force of 2000 N perpendicular to frontal plane was simulated to facial trauma on mandibular prosthesis.

Results: The Pmax and Pmin values of the symphysis and mandibular condyle and the cortical bone around the implants were evaluated by comparing them between all scenarios. Von misses stress values of subperiosteal implant screws were compared in four models. Stress distributions were observed on the abutments in all models.

Conclusion: Subperiosteal implants, one treatment approach in edentulous mandibles, can be applied in different materials and designs. However, stress distributions may vary during facial trauma in such patients. Therefore, all treatment options should be meticulously examined and applied in these patients.

Keywords: Atrophic mandible, mandibular trauma, subperiosteal implant

OP-087

Adverse Effects of Articaine: An Analysis of Reports to the FDA Adverse Event Reporting System

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Background: Local anaesthetics are frequently used for pain control in oral and maxillofacial surgery. Temporary suppression of pain enables the surgeon to work comfortably, while increasing the patients' comfort and cooperation. Articaine is a frequently used local anaesthetic.

Generally, local anaesthetics are safe agents. In some cases adverse effects such as hypoaesthesia, paresthesia, dizziness, nerve injury and facial edema may occur.

Objective: We aimed to determine the adverse effects reported in association with articaine usage in the Food and Drug Administration Adverse Event Reporting System (FAERS).

Methods: We scanned the FAERS database from 1999 to 2023, using the search term "articaine". We extracted the data by reason for use, date, outcome, country, age, gender, event severity, reaction type and frequency, and reporter type.

Results: From 1999 to 2023, there were 28,150,675 adverse drug events reported in FAERS, of which %0.006 were associated with articaine. Among the outcome frequencies 52.3% were non-serious reactions, 10.7% were hospitalized, 6.8% were disabled, 5.7% experienced life-threatening conditions, 2.2% required intervention and 1% died. The distribution of adverse effects were higher in female patients (%60,8). Most of the adverse effects were reported in the 18-44 age group (%26,4). Serious and non-serious adverse effect frequencies were similar (%47,8 and %52,1, respectively). The most reported adverse effects were drug ineffectiveness (%51,7), hypoaesthesia (%23,4) and paraesthesia (%17,3).

Conclusion: Articaine is used frequently in oral surgery. Articaine related adverse effects are more common in women. The most common adverse effect is drug ineffectiveness.

Keywords: Articaine, FDA, FAERS

OP-088

The Use of Corticosteroid in the Treatment of Central Giant Cell Granuloma

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Objective: The objective of this report is to highlight the significance of intralesional corticosteroid injection as a less invasive treatment option for central giant cell granuloma, a rare benign bone tumor primarily affecting the mandible, with occasional involvement of the maxilla. CGCG typically manifests in childhood and adolescence and can exhibit varying rates of growth. Differential diagnosis considerations include radicular cysts, odontogenic cysts, Brown tumors, and fibrous dysplasia. Treatment options include curettage, resection, and intralesional corticosteroid injection, with CT serving as a valuable diagnostic tool.

Case: A 10-year-old female patient presented to our clinic with facial a painless swelling in the anterior mandibular region. Intraoral examination revealed a red-purple swelling in this area. A radiographic examination of the patient revealed a multilocular radiolucent lesion with evidence of root resorption, buccal and lingual bone expansion, and migration. Following histopathological examination, the diagnosis of central giant cell granuloma was confirmed. Treatment consisted of intralesional corticosteroid injection, administered a total of six times at two-week intervals. Routine follow-up assessments indicated a noticeable reduction in the size of the lesion. During subsequent follow-up visits, bone regeneration was noted to fill the affected area once more.

Conclusion: In the treatment of CGCG, intralesional corticosteroid injection stands out as a treatment modality that eliminates the need for surgery, thereby averting functional and aesthetic defects while safeguarding teeth and surrounding vital tissues.

Keywords: Cortiosteroid, Giant cell granuloma

OP-089

Chemotherapeutics-Induced Osteonecrosis of The Jaw in a Patient With Acute Lymphoblastic Leukemia: A Rare Case Report

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Objective: Osteonecrosis of the jaw is a potential side effect of certain pharmaceutical agents used in the field of medicine. Bisphosphonates and other anti-angiogenic agents are the most common drugs that are attributed to cause medication-related osteonecrosis of the jaw (MRONJ). MRONJ is more frequently observed in women, older individuals, and in the mandible. As the treatment of acute lymphoblastic leukemia (ALL), the medical records of osteonecrosis are rarely reported. The purpose of this case report is to show that the Linker consolidation treatment used may be a potential risk factor for osteonecrosis and to bring our treatment approach to the attention of dentists.

Case: A 56-year-old male patient diagnosed with ALL who developed MRONJ during chemotherapy, despite not receiving bisphosphonates or denosumab, was presented. The patient was referred to maxillofacial department on November 2023 for intraoral necrotic bone exposures of the anterior maxilla. Clinical examination revealed exposed necrotic bone, extraoral swelling and persistent pain. The patient started an antibiotic therapy and was advised to rinse the defect with mouthwash every day. Surgical treatment consisted of debridement and PRF performed and was closed primarily. No signs of recurrence were observed during the 4-months follow-up. MRONJ is currently controlled.

Conclusion: This case report presents a unique case of MRONJ at maxilla of a patient without prior use of antiresorptive agents or denosumab. It highlights the need for close oral monitoring in patients with ALL before and during chemotherapy, as MRONJ can develop in the absence of these medications.

Keywords: Acute lymphoblastic leukemia, Chemotherapy drugs, MRONJ

OP-090

Multidisciplinary Approach for Odontogenic Keratocyst Treatment: A Case Report

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Objective: Odontogenic keratocyst is an aggressive cystic lesion and a common type of tooth-derived cyst due to the presence of odontogenic epithelial remnants in various regions of the jaw. Odontogenic keratocysts can occur at any age, but are typically observed in individuals under 40 years old. Complete eradication is challenging due to the cyst's delicate and thin nature, with recurrence rates ranging from 13% to 60%. The treatment may cause large defects which requires bone reconstruction. Guided bone regeneration (GBR) utilizing titanium mesh is a prevalent technique for bone augmentation, especially in cases of significant alveolar ridge defects, providing stable and excellent results. This paper reports the treatment of a recurrent odontogenic keratocyst case and reconstruction of the remaining bone defect.

Case: A 19-year-old female patient was referred to our department with swelling and pain in the right anterior mandibular region due to the third recurrence of a keratocyst. Clinical and radiographic examination revealed a unilocular cystic lesion. Under general anesthesia, the cyst was enucleated and the associated teeth were extracted. Aggressive curettage and peripheral ostectomy were performed to prevent recurrence of the lesion. Implant treatment was planned for the edentulous space. After healing of the cystic cavity, vertical and horizontal defect augmentation was performed using autogenous grafting and a customized titanium membrane. Two dental implants were then placed, followed by prosthetic rehabilitation.

Conclusion: This multidisciplinary approach addressed both the cystic lesion and subsequent bone loss, resulting in successful implant integration and functional restoration. Our case highlights the efficacy of combining surgical and prosthetic interventions in managing odontogenic keratocysts, leading to favorable clinical outcomes.

Keywords: keratocyst, recurrence, titanium membrane

OP-091

Conservative Treatment of Extensive Mural Ameloblastoma: Case Report in a 15 Years Old Patient

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Objective: Mural ameloblastoma is a subtype of unicystic ameloblastoma characterized by invasion or infiltration of tumor nodules into the fibrous wall of the cyst.

The treatment of these tumors remains controversial due to their locally invasive behavior, high recurrence rates and lack of consensus among surgeons regarding the extent of resection of adjacent healthy tissues. Depending on the size of the lesion, the goal of treatment is to preserve the continuity of the mandible or to achieve complete (partial or total) resection that can be managed with reconstruction.

The aim of this case report is to demonstrate that the contradictions and controversies in the indication of conservative treatment options for ameloblastoma are still a current problem.

Case: A systemically healthy 15-year-old male patient was admitted to our clinic with complaints of pain and swelling. On examination, signs of infection were found in the posterior region of the mandibula. CBCT revealed unilocular radiolucency extending to the posterior border of the ramus. Incisional biopsy was taken and a drain was placed. The biopsy resulted in a diagnosis of mural ameloblastoma. A full-thickness flap reaching the upper border of the ramus was then removed and enucleation and curettage was performed. 6 monthly follow-ups were performed for 3 years.

Conclusion: Treatments leading to mandibular discontinuity can result in facial asymmetry, dysfunctional mouth opening and masticatory defects, and consequently a reduced quality of life. Therefore, a conservative approach offers a successful treatment option for patients who can fulfill the requirements of a long postoperative follow-up.

Keywords: jaw pathologies, mural ameloblastoma, conservative treatment

OP-092

Zygomatic Implants: A Retrospective Case Series

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Objective: Rehabilitation of the patients who have edentulous and severely atrophic maxillary bone is challenging treatment process. Lots of treatment methods can be effective like augmentation, subperiosteal implants or zygomatic implants for these patients. In recent years consider to morbidity, duration and cost of treatment, zygomatic implants are one of the most popular treatment options for the patients.

Case: In our case series we have treated 3 patients with 8 zygomatic and 4 axial implant. All surgeries were done by same surgical team under general anesthesia in Hacettepe University Department of Oral and Maxillofacial Surgery. In one case treatment done by four zygomatic implant, other cases treated with one zygomatic implant to each side and 2 axial implant at anterior region. All posteriorly placed zygomatic implants were integrated with Branemark method.

2 patients completed their prosthodontic treatment period and the last patient had 1 implant failure recently. We planning the second surgery and immediate loading after few weeks later.

Conclusion: In our opinion patients can have sufficient results with zygomatic implants. In surgical phase Zygomatic Anatomical Guided Approach (ZAGA) and change the angles and numbers of anterior axial implants can be considered. For the decision the most important parts are the experience of the surgeon and the emerges of the implants.

Keywords: Atrophic Maxillary Bone, Rehabilitation, Zygomatic Implant

OP-093

Evaluation of The Effect of Guided Bone Regeneration in Mandibular Advancement on Bone Healing by Fractal Analysis: A Retrospective Cohort Study

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Objective: The aim of the present study was to identify effect of the guided bone regeneration on trabecular bone healing after BBSO.

Materials-Methods: This retrospective study included patients who underwent BSSO at Erciyes University Faculty of Dentistry, Oral and Maxillofacial Surgery Hospital from January 2020 through February 2023. In this retrospective study, membrane-used (membrane group) and non-membrane-used (control group) osteotomy areas were evaluated in terms of trabecular bone healing by fractal analysis. For evaluation, fractal dimension was measured in the patients' 6th month post-operative cone beam computed tomography (CBCT).

Results: The analysis included 54 operation sites in 27 patients (21 female, 6 male; median age, 22,8 yr; range, 18 to 30 yr). The fractal dimension (FD) values at the osteotomy area of membrane group were found to be significantly higher than the control group ($p < 0,05$).

Conclusion: Concomitant use of guided bone regeneration with mandibular advancement would be an effective method for generating a favorable bone healing in BSSO.

Keywords: bilateral sagittal split osteotomy, orthognathic surgery, three-dimensional imaging

OP-094

Women in Oral and Maxillofacial Surgery What Does the Literature Say?

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Objective: Women's participation in business life began in the mid-nineteenth century, however, it cannot be denied that they still encounter gender discrimination throughout their careers. This study aims to evaluate how the problems faced by women working in oral and maxillofacial surgery (OMS) are addressed in the literature.

Material-Method: A literature review was conducted, based on the PubMed database.

Results: 33 of the 257 articles found were related to the subject. The most researched topic was women's career choices in OMS (11 articles). Seven articles were found regarding the difficulties faced by female oral and maxillofacial surgeons (OMSs) in their working lives (sexual harassment, gender discrimination, payment issues, etc.). In 20 articles, female authors were the first author, and the oldest article was published in 1996.

Conclusion: Current literature shows that although pursuing a career in oral and maxillofacial surgery is more challenging for women, an increasing number of women are choosing a career in OMFS. The fact that women's representation tends to increase, especially in different leadership positions, is hopeful for the future of our profession.

Keywords: oral maxillofacial surgery

OP-096

Does High Blood Pressure Affect The Management of Patients During The Surgery Under Local Anesthesia?

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Objective: Hypertension represents one of the most common challenging complications during the surgery. Dental surgical procedure may increase stress level in some patients during treatment. Stress arising from pain or anxiety may change both blood pressure and heart rate. Uncontrol or undiagnosed hypertension can make oral surgery difficult under local condition. The aim of the preliminary study was to compare bleeding status and pain in the patients with and without hypertension undergoing local surgery.

Materials-Methods: A total of 20 study subjects was periodically monitored and taken note at Bezmialem Vakıf University. Advanced surgical procedures lasting more than 1 hour in patients with hypertension and patients in healthy status under local anesthesia were included into the study. Regular blood pressure and pulse checks were recorded in a 5-minute, starting before the local anesthesia injection until end of the surgery.

Results: Patients diagnosed as hypertension exhibited much more discomfort during the surgery when compared with normotension patients. Also, bleeding scores and pain were statistically found to be high in the hypertension group.

Conclusion: High blood pressure results in excessive bleeding amount and more local anesthesia injection. These challenges may affect the management of patients undergoing surgery under local anesthesia. In patients diagnosed with hypertension, care should be taken to comply with the medical instructions and monitorization of blood pressure status regularly in the direction of their physicians.

Keywords: local anesthesia, hypertensive patients, hemodynamics

OP-097

Is Local Anesthesia Really Necessary in Orthognathic Surgery: Prospective, Clinical and Split Mouth Study

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Objective: The aim of this study is to compare the effectiveness of locally applied articaine hydrochloride and sterile saline on intraoperative bleeding and postoperative pain in orthognathic surgery.

Materials-Methods: A total of 25 individuals who were in need of corrective jaw surgery were included for the study. Inclusion criteria are patients between the age of 18-40, ASA class 1, who need orthognathic surgery to correct skeletal dental anomalies. Exclusion criteria are; ASA class 2 and above, patients with renal and hepatic dysfunction, with a history of long-term NSAID use. A locally anesthetic injection with local anesthetic (articaine hydrochloride with 1:200,000 epinephrine) was applied to one side of the mandible and the same amount of saline was injected to the other side. Bilateral sagittal split osteotomies were performed under general anesthesia by the same anesthetist and surgeon. Data were analyzed using unpaired t-test and Chi-square test.

Results: The study sample was composed of 25 patients with a mean age of 21.5 years, and 52% of patients were women. According to the results of the study, intraoperative blood loss was higher on the applied sterile saline side, but there was no significant decrease on the applied articaine hydrochloride side ($p > 0.005$). Similarly, in the average postoperative VAS score value was not statistically significant differences between the either sides ($P > 0,5$).

Conclusion: The efficacy of regionally applied saline on intraoperative bleeding and postoperative pain in orthognathic surgery was evaluated, and no significant difference was found between local anesthetics and nerve block.

Keywords: Articaine, Orthognathic surgery, Local anesthesia

OP-098

The Influence of Orthognathic Surgery on Cervical Lordosis and Head Posture in Class 3 Patients

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Introduction: The objective of this prospective study was to evaluate the impact of orthognathic surgery on cervical lordosis and head posture in patients with mandibular prognathism.

Patient and Methods: Patients with Angle Class 3 malocclusion, aged between 18 and 40 years, with an indication of orthognathic surgery (orthognathic surgery group) and patients with Angle Class 1 malocclusion (control group) were included in this study. Orthognathic surgery group (OSG) consisted of 19 patients (7 female, 12 male; mean age 21.79 ± 3.68 years). Control group (CG) included 18 individuals (8 female, 10 male; mean age 23.56 ± 1.50). A slightly modified lateral cephalometric radiograph was taken in order to capture all structures from the Nasion-Sella line to the seventh cervical vertebra. The lordosis angle of the patients cervical spine was calculated using the Cobb method preoperatively (P0) and at least 10 weeks after the operation in OSG (P1) by the same observer.

Results: The mean follow-up was calculated as 7.61 ± 5.40 months. Statistical analysis of the angles revealed no significant changes in cervical lordosis (C1/C2, C3/C7, C2/C7) or head posture (NSL/OPT; NSL/VER) after orthognathic surgery ($p > 0.05$). No statistically significant difference was seen between OSG (P1) and control group regarding both cervical lordosis and head posture ($p > 0.05$). There was no statistically significant relationship between the skeletal class 3 surgical correction and cervical lordosis.

Conclusion: The results of this study suggest that bimaxillary orthognathic surgery did not significantly affect cervical lordosis and head posture.

Keywords: orthognathic surgery, Class 3 malocclusion, cervical lordosis

OP-099 Management of Delayed Bilateral Mandibular Angle Fracture: A Case Report

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Objective: Mandibular fractures are the second most common fracture in the oro-maxillofacial region after nasal fractures. These fractures may involve one or more regions depending on various factors such as the cause and type of injury, morphological and anatomical differences in the mandible. Mandibular angulus is one of the most commonly affected areas. If not diagnosed and treated early, it can cause serious complications such as malfusion and malocclusion, and lead to difficult surgical procedures such as refracture and alignment of the incorrectly fused bone tissue during surgical treatment

Case: A 35-year-old male patient applied to our clinic with complaints of pain and malocclusion in the lower jaw. It was learned that the patient had a history of assault 3 months ago and did not receive treatment due to being in intensive care during this period. A clear fracture line was seen in both mandibular angles in the orthopantomography image taken. Under general anesthesia, faulty fused fracture lines were broken with a transbuccal approach and brought to the correct position, and open reduction and internal fixation were performed. It was also supported by intermaxillary fixation against the risk of malocclusion.

Conclusion: If the treatment for mandible fractures is delayed, difficulties such as not providing ideal occlusion due to malunion and prolonging the operation time may occur, which may reduce the success rate. With early diagnosis and appropriate treatment plan, complications that may occur later in patients can be minimized and the chance of success can be increased.

Keywords: Mandibular Fracture, Malocclusion, Malunion

OP-100

Clinical Importance of Definitive Diagnosis of Oral Malignant Melanoma: A Case Report

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Objective: Oral malignant melanoma is a rare and aggressive neoplasm. Due to its poor prognosis, a routine biopsy of pigmented lesions with unknown origin is recommended. The nodular type of oral melanoma grows rapidly and has a vertical growth pattern starting with direct invasion into the basal layer. This presentation reports a case of nodular type malignant melanoma that was prediagnosed as pyogenic granuloma.

Case: A 65-year-old woman came to our clinic with a lesion in right maxilla that began as a blood clot two years ago and has grown over the past six months. The clinical examination revealed a pedunculated expansive lesion with a smooth and glossy surface measuring 1.5x3cm. In some places, it contained melanin pigmentation areas and was associated with the incompatible prosthesis on the buccal side of teeth number 11-15. However, there were no radiographic abnormalities. We performed an excisional biopsy, and early diagnoses pointed towards pyogenic granuloma or peripheral giant cell granuloma.

The patient's biopsy result showed nodular-type malignant melanoma, and the surgical margin was positive. As a result, the patient was immediately referred to an otolaryngology specialist. PET CT scan revealed one suspicious ipsilateral lymph node metastasis. The ENT team removed the previously biopsied sites, and the resulting defect area was closed with a buccal rotation flap. A bilateral lymph node dissection was performed at zones I, IIA, IIB, and III during the same surgery.

Conclusion: Sometimes, nodular-type malignant melanoma may be difficult to distinguish clinically from other reactive lesions, and patients should be closely followed up.

Keywords: Nodular type malign melanoma, metastasis, pyogenic granuloma

OP-101 Secondary Palatal Elongation: Improvement in Speech Quality

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Objective: Cleft palate is one of the challenging problems in the field of craniofacial surgery. In particular, the conventional methods of bilateral and severe cleft palate repairs have failed to achieve normal speech. In most instances, secondary procedures such as pharyngoplasty and pharyngeal flap surgery are performed to improve speech. This study introduces secondary palatal elongation (SPE) as a new approach to cleft palate repair.

Materials-Methods: The patients included usually had a short palate and unrepaired palatal muscles. The authors' procedure involved dissecting the previously repaired palatal mucosa and pushing back and cutting the nasal mucosa of the palate horizontally and further pushing it back. Then, 1 or 2 buccal mucosal flaps were used to repair the nasal mucosal defect of the palate. In case of unrepaired veloplasty from the primary surgery, the levator muscles were dissected and sutured together to perform veloplasty.

Results: The range of palatal elongation was 15 to 25 mm. Secondary palatal elongation has been performed on 17 patients since 2007 with a high rate of speech improvement.

Conclusion: Based on this 9-year experience with performing SPE, SPE is a radical anatomic technique of palatal elongation as compared with pharyngoplasty and pharyngeal flap surgery. All 17 patients who underwent SPE showed improvement in speech, from very poor to poor speech and from normal to good speech.

Keywords: Cleft Palate, Speech Improvement

OP-102

Effect of Protein Intake on Wound Healing and Quality of Life After Impacted Mandibular Third Molar Extraction

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Objective: Protein is the most important macronutrient that affects the immune system and wound healing. This study aims to assess the impact of current protein intake on wound healing after surgical removal of impacted mandibular third molars, as well as the relationship between patients' pain levels, degree of wound healing, and quality of life.

Materials-Methods: Patients who have asymptomatic impacted mandibular third molars with easy and medium difficulty levels according to the Pernambuco index were included in the study. A food consumption frequency form was used to gather information on dietary habits, focusing on milk, dairy products, meat, eggs, and legumes. Additionally, a 24-hour food consumption record was taken prior to extraction. Wound healing was evaluated using Landry's Wound Healing Index and Early Wound Healing Index.

Results: Twenty-five patients (16 female and 9 male) aged between 19 and 33 years (23.3±2.88) were included for statistical analysis. No significant differences were found in age, sex, BMI, surgical difficulty, or surgery duration between groups. The decrease in mouth opening on the 7th postoperative day was significantly higher in patients with insufficient protein intake compared to those with excess intake. EHI scores on the 7th day were notably higher in patients with increased protein intake, indicating better soft tissue healing.

Conclusion: This study highlights the positive association between protein intake and enhanced healing post-surgical removal of third molars. Future dietary intervention studies are needed to investigate the impact of protein intake on healing following maxillofacial procedures.

Keywords: impacted third molar, wound healing, protein intake

OP-103

Evaluation of The Efficacy of Injectable Platelet-Rich Fibrin and Concentrated Platelet-Rich Fibrin Injections Combined With Arthrocentesis in The Treatment of Temporomandibular Joint Internal Disorders

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Objective: The aim of this study is to investigate the effectiveness of injectable platelet-rich fibrin (I-PRF) and concentrated platelet-rich fibrin (C-PRF) injections applied after arthrocentesis in patients with temporomandibular joint internal derangements.

Materials-Methods: This study was conducted with patients who presented with temporomandibular joint complaints and met the inclusion criteria. The patients were randomly divided into three groups in which arthrocentesis alone or arthrocentesis and I-PRF or C-PRF injections were applied. Pain level, maximum mouth opening (MAA), lateral and protrusive movements and joint sounds preoperatively, postoperatively, 1st week, 1st month and 3rd month; Oral health-related quality of life and mandibular dysfunction were evaluated preoperatively and at 3 months.

Results: 30 patients (mean age 41 ± 12.19), 2 male and 28 female, were included in the study. Although I-PRF and C-PRF groups had generally better results in terms of clinical parameters, statistically significant differences were observed between the groups only for MAA between postoperative-1st week ($p=0.023$), and for left lateral movement between preoperative-1st month ($p=0.043$), preoperative-3rd month ($p=0.005$) and 1st week-3rd month ($p=0.007$). No statistically significant difference were observed between the groups in terms of quality of life and mandibular dysfunction ($p>0.05$).

Conclusion: Intra-articular injections of I-PRF and C-PRF following arthrocentesis were more successful compared to arthrocentesis alone in terms of efficacy on clinical parameters, although limited to the early period for C-PRF.

Keywords: Arthrocentesis, internal derangement, platelet-rich fibrin

OP-104 Lateral Nasal Wall Osteotomy at Cleft Lip and Palate Patients

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Objective: This study aimed to determine the differences in the anatomy and variations of the lateral nasal wall (LNW) in patients with cleft lip and palate (CLP) and Class III dentofacial deformities (CDD), to establish a safe entry margin for performing an ideal LNW osteotomy line during Le Fort I surgery.

Materials-Methods: Fourteen patients with CLP and CDD were evaluated at the Medipol Mega University Hospital between July 2021 and February 2024. The axial images of 14 CT scans (5mm above the deepest point of the nasal floor), including cleft and non-cleft sides, were evaluated. Linear and angular distances to the pterygopalatine canal were measured using NemoFAB software.

Results: Of 14 patients; 6 males and 8 females with an average age of 29.79 ± 8.32 years. Ten patients had unilateral complete cleft lip and palate (UCLP), while four had bilateral complete cleft lip and palate (BCLP). The average first angulation of the lateral nasal wall was 154,49 degrees on the non-cleft side and 151,38 degrees on the cleft side of UCLP. Angular and Linear distances to the descending palatine artery in the non-cleft side and cleft side of the UCLP were (A: 36,97-34,15/L: 35,08-33,06), BCLP patients were (A:31,96-32,91/L:30,6-31,45). All parameters were not statistically significant.

Conclusion: The cleft and non-cleft side LNW osteotomies of CLP patients are similar in distance to the DPA and equally safe to perform.

Keywords: Cleft Lip and Palate, Lateral Nasal Wall Osteotomy, Le Fort I

OP-105

Examination of the Effect of Platelet-Rich Fibrin and Concentrated Growth Factors Applied After Impacted Third Molar Tooth Extraction on Post-Extraction Complications and Wound Healing

İzzet Acıkan

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Objective: The aim of this prospective study is to evaluate the effect of Platelet rich fibrin (PRF) and concentrated growth factor (CGF) applied to impacted mandibular third molar extraction sockets on the prevention of postoperative complications.

Materials-Methods: In this study, 52 patients who underwent impacted tooth extraction were randomly divided into 3 groups: control group, CGF (concentrated growth factor) group and PRF (Platelet rich fibrin) group. Postoperative outcomes, including pain, swelling, mouth opening, and wound healing, were evaluated on the 1st, 2nd, 3rd, 7th day, and 1st month. A p-value < 0.05 was considered statistically significant.

Results: According to the VAS scale, no statistically significant difference was found between the groups in the postoperative period in pain perception ($p < 0,05$). Additionally, when wound healing, swelling and mouth opening were examined, no significant difference was found between the groups in the postoperative period ($p < 0,05$).

Conclusion: When the short-term results of the PRF and CGF groups applied into the socket and the control group were evaluated within the limits of this study, no significant difference was found between the groups in terms of postoperative complications and wound healing after impacted third molar surgery. This study results suggest that although there are promising results in some studies for CGF and PRF, further studies are needed to evaluate the effectiveness of CGF and PRF.

Keywords: Concentrated growth factors; Platelet-rich Fibrin; Postoperative complications

OP-108

3D Evaluation of Mandibular Condyle Morphology Changes After Ortognathic Surgery in Patients with Maxillomandibular Asymmetry

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Objective: The aim of the study is to evaluate the morphological changes in mandibular condyles after orthognathic surgery and compare the effect of orthognathic surgery on surface changes in the condyle in asymmetric and non-asymmetrical patients using 3D measurement.

Materials-Methods: A retrospective study was designed using CBCT data of 42 patients (21 female and 21 male), all of whom were operated at Hacettepe University Oral & Maxillofacial Surgery Department, Ankara, Turkey. Measurements were performed on pre-operative and post-operative CBCT records of 28 patients with asymmetry and 14 patients without asymmetry. Two independent study groups were formed as condyles, deviation side and contralateral side of asymmetry patients. A control group was formed for the patients without asymmetry and comparisons were made with the study group. The micro CT analysis program "CTAn Software" (ver. 1.20.3.0, Bruker, Skyscan, Aartselaar, Belgium) was used for measurements and analyses. "CTVol Software" (ver. 2.3.2.0, Bruker, Kontich, Belgium) was used for 3D modeling and surface registration processes. Microstructural analyzes were used to provide information about trabecular bone remodeling and resorption.

Results: Condyle surface and structure changes occurred in all groups. Significant bone volume reduction occurred at the deviation side condyle of the study group. The results of the bone microstructural analysis on the deviation side were also consistent with the resorption pattern.

Conclusion: Although bone surface and bone structure alterations were observed in all our patients which is a part of remodeling process; significantly higher bone resorption was observed at the deviation side condyle.

Keywords: 3D Modelling, Micro CT, Orthognathic Surgery

OP-109

Evaluation of the Effect of Different Placement Speeds and Torques on Implant Placement in a Bone Model

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Objective: The aim of this study was to evaluate the effect of two different insertion speeds at 8 different insertion torque values ranging from 25 to 60 during implantation in a dense polyurethane D1 bone model on the placement status and removal torque of dental implants.

Materials-Methods: In this single-blind in vitro study, 50 pcf single-layer polyurethane plates were used. In the study, a total of 320 implant sockets were divided into 2 groups: Group 1 (30 rpm) and Group 2 (50 rpm) in terms of insertion speed. Group 1 and Group 2 were divided into 8 subgroups: 25, 30, 35, 40, 45, 50, 55, and 60 torques. There were 20 implant sockets in each subgroup. During the implantations, implant placement status and removal torque values were assessed.

Results: There was a statistically significant difference between the 30 and 50 RPM groups in terms of overall implant placement status ($p<0.01$). It was found that the removal torque values at 50 RPM were statistically significantly higher than those at 30 RPM ($p<0.01$).

Conclusion: This study showed that in dense D1 bone, the minimum parameters at which all implants could be placed at bone level were 50 torque at 30 rpm and 40 torque at 50 rpm.

Keywords: polyurethane modal, dental implant; insertion torque; removal torque

**POSTER
PRESENTATIONS**

PP-001

Evaluation of The Knowledge Levels and Awereness of Dentists in Turkey about Oral Cancers

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Early diagnosis is crucial for the management of oral mucosal carcinomas, which are a significant contributor to mortality. Patients initially seek advice from their dentists regarding issues in their oral cavity. The knowledge and awareness of dentists regarding the matter is essential for early diagnosis. The objective of the study is to evaluate the knowledge, frequency, and awareness of independent dentists in Turkey about the early diagnosis and biopsy of oral cancer.

This is cross-sectional questionnaire-based research. The dentists were contacted by e-mail. The study assessed the dental practitioners' level of knowledge on oral cancer, frequency of performing biopsies, clinical experience, and whether they received education on the subject.

The average age of the dentists who participated in the study was 33.96 ± 9.79 . 55.3% of dental practitioners were women (n=208), and 44.7% were males (n = 168). 64.9% of dental practitioners (n=244) did not perform a biopsy due to lack of experience. The average information score of the dentists is 4.70 ± 1.66 . For dentists with less than 5 years of clinical experience, the knowledge score was 5.09 and for dentists who had more than 15 years of medical experience, it was 4.17. There is a statistically significant relationship between the knowledge scores of dentists and their age in a negative direction ($p < 0,05$).

The study determined that dentists require additional training, particularly in post-graduate programs and practical courses focused on oral cancer and biopsy, which are regarded to be beneficial.

Keywords: Biopsy, Dentists, Oral Cancers

PP-002

Does The Patient-Specific Depth of the Lateral Nasal Wall Osteotomy Affect the Pterygomaxillary Separation During Le Fort I Downfracture?

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Objective: The study aimed to investigate the effect of patient-specific lateral nasal wall osteotomy (LNO) on the lateral nasal wall (LNW) and pterygomaxillary junction (PMJ) separation during Le Fort I.

Materials-Methods: Forty-three patients were randomly assigned to either the conventional or patient-specific (study) osteotomy groups. In the study group, LNW depth was measured before surgery in the axial section of the CT scan, and LNO was performed at a depth of 2 mm less than the measured distance. In the conventional osteotomy group, LNO was performed at 25 mm for females and 30 mm for males. Separation types were classified as follows: LNW types; Type1-from the osteotomy line; Type2- 2-4 mm above the osteotomy line; Type3- 4 mm or more above the osteotomy line. PMJ types; Type1-including the tuber maxilla; Type2-from the pterygomaxillary junction; Type3-including the pterygoid plates.

Results: In both the conventional ($P=0.052$) and the study groups ($p=0.828$), there were no significant differences between LNW separation type and LNW depth. Type 1 ($P=0.0003$) and Type 2 ($P=0.0051$) LNW separation types presented a significant difference between groups. A chi-square test showed a significant correlation between the surgical groups and PMJ separation patterns ($P<0.05$).

Conclusion: The results of our study indicate that using patient-specific LNO simplifies the surgery and optimizes the LNW separation. Moreover, PMJ separation is better in patients who undergo patient-specific LNO. Ideal separations of the LNWs shift the rotation axis towards the PMJ, and separation of the PMJ goes through the curved osteotomy line on the posterior maxillary wall. Patient-specific LNO optimizes the LNW and PMJ separation.

Keywords: Le Fort I, Lateral Nasal Wall, Orthognatic Surgery

PP-003 Effect of Osteotomy Plane Angle on Vertical Displacement Patterns in Le Fort I Surgery for Maxillary Advancement

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Objective: Virtual surgical planning facilitates the orthognathic surgical procedures and allows for more precise results. The aim of this study is to evaluate the position of the maxilla in relation to angular changes in the osteotomy plane during virtual surgical planning for Le Fort I surgery.

Materials-Methods: The archived computed tomography data of three patients who underwent bimaxillary orthognathic surgery at the Bezmialem Vakif University Faculty of Dentistry were used to generate three-dimensional models of the cranium and maxilla using NemoFab software (Nemotech, Spain). An osteotomy plane was created through the most inferior part of the priform aperture and the 5 mm above the roots of most posterior molars. The second, third, and fourth osteotomy planes were created by increasing the angle of the plane by 3, 6, and 9 degrees, respectively, keeping the posterior points fixed while raising the anterior points. Maxillary osteotomies were performed, and the maxilla was advanced 1-10 mm. The vertical distance between the proximal and distal segments was measured at three points. Multiple linear regression analysis was conducted to examine the relationship between maxillary vertical displacement and osteotomy type/maxillary advancement amount.

Results: Increasing the angle of the osteotomy plane resulted in a significant vertical displacement of the maxilla ($p < 0.0001$), while no displacement was observed in other directions.

Conclusion: Any alteration in the angle of the osteotomy plane can lead to vertical displacement of the maxilla during advancement. Therefore, it is recommended that the osteotomy line be kept as parallel to the ground as possible.

Keywords: Cutting plane, orthognathic surgery, virtual surgical planning

PP-004

Analysis of Oral and Maxillofacial Surgery Histopathology outcomes in Tertiary Center in Oman

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Objective: to determine the prevalence and distribution of oral and maxillofacial biopsies that have been histopathologically diagnosed at Anahdha Hospital in Oman.

Materials-Methods: This is a retrospective cross-sectional study conducted in a single tertiary center in Oman. The study analyzes 512 randomly selected biopsies out of a total of 3310 biopsies submitted for oral and maxillofacial histopathological examination between January 2010 and December 2022. Data were collected from patient case notes and transferred to Microsoft Excel for analysis using SPSS. Research ethics approval was obtained from the hospital's research committee.

Results: The study's findings are in agreement with data reported in other investigations, despite the challenges of comparing prevalence rates across different studies. The prevalence and distribution of oral and maxillofacial pathologies were determined based on the histopathological diagnoses of the selected biopsies.

Conclusion: This study provides valuable information on the prevalence and distribution of oral and maxillofacial pathologies in Oman. It serves as a baseline for future research in this area and highlights the importance of histopathology services in diagnosing and treating these conditions.

Keywords: oral biopsy, Maxillofacial histopathology, oral disease

PP-005

Evaluation of Mental Nerve, Mental Foramen, and Incisive Nerve Structures Using Cone Beam Computed Tomography in Patients Applying to Kocaeli University Faculty of Dentistry

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Objective: This study aims to evaluate the mental nerve, mental foramen, and mandibular incisive nerve structures with cone beam computed tomography (CBCT).

Materials-Methods: CBCT images of 2176 patients taken for various reasons were examined retrospectively. In CBCT images, the presence of the anterior loop and caudal loop of the mental nerve, the width, depth, and height of the mental foramen, the distance of the mental foramen to the alveolar crest, the mandibular lingual border and the mandibular inferior border, the tooth to which the mental foramen is closest and its location and the incidence of mandibular incisive nerve and presence of accessory mental foramen were examined. All measured values were compared according to age, gender, and occurrence on the right and left sides.

Results: In 166 patients (93 women, 73 men), the mental foramen width was 3.61mm-4.1mm in men and women, respectively; depth 2.19- 2.6 mm; height 3.23- 3.81 mm; the distance between the mental foramen and the crest is 15.9-17.37 mm; the distance between the mental foramen and base is 8.41-9.82 mm; the distance between mental foramen and lingual is 4.25- 4.36 mm; the distance between the mental foramen and the nearest tooth was measured within the range of 3.26-4.02 mm. The most common types were type 1 (55.4%), type 3 (27.7%), and type 2 (16.8%), respectively.

Conclusion: To perform surgical operations with maximum safety, mental nerve, incisive nerve, and anatomical variations should be carefully evaluated.

Keywords: Mental foramen, Anterior loop, Caudal loop

PP-006

Nonunion and Infection: Case Report

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Nonunion and İnfection: Case Report Nonunion refers to the failure of a fracture to heal within six months. The primary causes include inadequate reduction, immobilization, infection, and diabetes, which negatively impacts wound healing.

A 42-year-old female patient presented to our clinic with pain and swelling in her left mandibula. Her medical history revealed that she has diabetes, with high HbA1c levels that were regulated after blood tests. She had a traffic accident a year ago, resulting in a fracture in the left lower mandibular angle, for which she underwent plastic surgery at another center. Examination showed a fistula in the left mandibular region. Panoramic X-ray revealed a single plate applied to the patient, but malunion was observed in the fracture line. It was decided that the patient would undergo reoperation. A modified submandibular approach was planned to reach the fracture site and revise the scar tissue observed during the extraoral examination. Rigid fixation is a treatment method that allows for primary bone healing without the formation of callus. Although various surgical instruments and equipment are available for this method, reconstruction plates and lag screws are commonly used. Malunion occurred in the patient who presented to our clinic due to the inability to achieve rigid fixation. Champy, a semi-rigid fixation technique, requires the plate to be placed along the oblique ridge tension line.

Even in simple fractures, treatment performed by experienced surgeons following current plating principles yields better outcomes.

Keywords: Nonunion, İnfection

PP-007

Pleomorphic Adenoma a Case Report

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Objective: Salivary gland tumors constitute 1-4% of all neoplasms in humans. Pleomorphic adenoma, benign mixed tumor, is the most common salivary gland tumor and is most frequently seen in the parotid gland. This tumor is seen in 80% of the parotid gland, 10% of the submandibular gland, and 10% of the minor salivary glands and sublingual gland. Among the minor salivary glands, it is most frequently located in the hard palate. The treatment for pleomorphic adenoma is surgical excision. After appropriate surgical excision, recurrence is generally not observed.

Case: A 28-year-old female patient applied to our clinic with a complaint of a mass in the midline of the palate that had been present for 1 year and was growing over time. Intraoral examination revealed a painless, immobile, hard consistency, smooth-surfaced mass, approximately 3.5x3.5 cm in size, in the midline of the hard palate. The patient was operated on under local anesthesia. The mass was completely removed along with the periosteum, observing the surgical margins. The defect area in the hard palate was primarily sutured. No postoperative complications occurred. Histopathologically, it was reported as pleomorphic adenoma. No recurrence was observed during the 24-month follow-up period.

Conclusion: Pleomorphic adenoma is a rare tumor of the hard palate that should be considered in the differential diagnosis of hard palate masses. In the treatment of these lesions, it is appropriate to remove the mass by observing appropriate surgical margins. Patients should be followed lifelong for recurrence. It should not be forgotten that malignant degeneration may occur in patients with recurrence.

Keywords: Pleomorphic adenoma, Maxilla, Neoplasm

PP-008

Evaluation of Complications and Patient Satisfaction Following Impacted Mandibular Third Molar Surgery with Close Relationship to the Inferior Alveolar Nerve

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Objective: This study aims to evaluate the complications and patient satisfaction following impacted mandibular third molar surgeries, which are closely related to the inferior alveolar nerve.

Materials-Methods: Study data were collected from 81 patients who required extraction of the mandibular impacted third molar tooth, which has a close relationship to the inferior alveolar nerve. The patients' age, gender, presence of systemic disease, smoking, medication use that would affect the imaging data, and pre-operative and post-operative mouth openings were recorded. The impaction type and position of the extracted impacted third molar teeth, radiographic signs between the root of the tooth and the inferior alveolar nerve, operation time, and the presence of post-operative alveolitis were recorded. Two surveys were administered to the patients 1 week after the impacted mandibular third molar extraction to evaluate their satisfaction levels and complication levels. The data obtained was analyzed statistically.

Results: When the relationship between the patients' postoperative complications and their satisfaction scores was evaluated, it was seen that as the patients' complication scores increased, their satisfaction scores decreased in a statistically significant manner. When the complication scores were examined according to the difficulty of the tooth, it was seen that the complication score increased as the difficulty level of the tooth increased.

Conclusion: Detailed examination of the radiographic image before the surgical operation will contribute to increasing post-operative patient satisfaction by minimizing possible complications.

Keywords: Mandibular third molar, Alveolar inferior nerve, Complication

PP-009

Evaluation of the Relationship Between Intake of Proton Pump Inhibitors and Peri-implant Bone Microstructure by Using Fractal Analysis: A Retrospective Case-Control Study

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Objective: The use of proton pump inhibitors (PPIs) may be associated with implant failure, as they have the potential to influence bone metabolism and the osteointegration process. This study aimed to evaluate the long-term impact of PPI usage on bone metabolism by employing fractal analysis on periapical radiographs.

Materials-Methods: We adopted a retrospective, matched case-control design and conducted this study. We retrospectively analyzed a database of 27 PPI users (87 dental implants) and then established a control group comprising 27 matching nonusers (88 dental implants) based on age, sex, implant-specific details including brand, macro design, location, and diameter, follow-up period, the presence of augmentation, and the smoking status of participants, thereby resulting in 54 patients (175 dental implants) in all. The primary predictor variable was PPI use. Outcome variables were the incidence of implant failure, fractal dimensions (FD), and crestal bone loss (CBL) on periapical radiographs.

Results: Among the 27 PPI users, three patients experienced implant failure, while there were no failures among nonusers after a mean follow-up of 76.9 months ($p > 0.05$). The mean \pm SD FD values at the final follow-up visits were 1.14 ± 0.07 for PPI users and 1.19 ± 0.05 for nonusers ($p < 0.01$). No significant differences in CBL values between the two groups ($p > 0.05$).

Conclusion: Based on this study, PPI intake may negatively affect bone metabolism around dental implants. Clinicians should be careful about osteoporotic changes in the jaws when examining PPI users.

Keywords: dental implant, fractal analysis, proton pump inhibitor

PP-010 Peri-Implant Soft Tissue Reconstruction Using Free Gingival Graft: A Case Report

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Objective: Soft tissue grafting procedures are increasingly utilized in various aspects of dental implant therapy, addressing indications such as recession coverage, keratinized tissue (KT) augmentation, and enhancement of soft tissue volume. The absence of KT is linked to peri-implant soft tissue diseases. Mucogingival surgery aims to establish or augment attached gingiva around teeth or implants, with recent studies emphasizing the significance of oral hygiene over the quantity of attached gingiva. This case report details a free gingival graft obtained from palatal mucosa to address the lack of keratinized attached gingiva around mandibular implants.

Case: In a 60-year-old patient, two implants were placed, followed by a 3-month osseointegration period. During the healing caps session, it was observed that there was no attached gingiva around the implants. A planned free gingival graft from palatal tissue aimed to acquire adherent KT around the implants and enhance vestibule depth in the anterior mandible. Grafts were bilaterally harvested, with the recipient bed prepared between mandibular canines. The inferior part of the recipient site was secured with periosteal sutures at the vestibule depth. Grafts from both sides of the palatal tissue were sutured onto the recipient area using 6/0 propylene and 7/0 vycril sutures. Pressure was applied with gauze to prevent dead space. Sutures were removed after 2 weeks, and satisfactory healing was observed by the 6th week.

Conclusion: Establishing keratinized tissue around implants facilitates oral hygiene, and free gingival grafts prove effective in achieving attached gingiva, offering viable outcomes.

Keywords: free gingival graft, implant surgery, lack of keratinized tissue

PP-011 Custom Designed in Atrophic Maxilla Subperiosteal Implants

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Curved implants, bone graft and traditional endosseous implants, zygomatic implants and subperiosteal implants are used for the treatment of edentulous patients with maxillary bone atrophy. The purpose of this case report is to set an example for the use of the subperiosteal implant technique to design a new smile for the patient by saving him from the functional, physical and psychological discomfort caused by maxillary atrophy. The patient is a 48 year old woman with no systemic disease and no medication. Alcohol and smoking are also not present. 2 months ago, the patient underwent vestibular deepening along the entire arch. Subperiosteal implants were placed first in the left and then in the right maxilla, from posterior to anterior, from the zygoma to the palatine. Afterwards, the screws were tightened and fixed and a cap was placed over the implants. The flaps in the buccal and palatal regions were freed. A modified matrix suture was placed around the caps so that no bone and no subperiosteal implant section was exposed. The patient was discharged after the appropriate medical treatment was provided. The complete safety of this minimally invasive fixation technique of subperiosteal implants in the atrophic maxilla has not yet been proven and further clinical studies are needed.

Keywords: Dental Implantation, Subperiosteal; dentistry; oral surgery

PP-012 Rare Hybrid Lesion In The Mandible: A Case Report

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Objective: Hybrid lesions of the jaws, characterized by the coexistence of two distinct lesions of the same histopathologic origin in the same location, are rare entities. Ameloblastoma, calcifying cystic odontogenic tumor, and odontoma are among the most common ectodermal tumors, along with other lesions. Despite this, there are only three reported cases in the literature of hybrid lesions involving odontogenic keratocyst and odontoma. The aim of this presentation is to describe a rare case of a hybrid lesion consisting of odontogenic keratocyst and complex odontoma.

Case: This case report presents a hybrid lesion consisting of odontogenic keratocyst (OKC) and odontoma associated with an impacted canine in the mandible of a thirteen-year-old female. The patient reported no complaints of pain or sensitivity in this area.

Panoramic radiography and CBCT revealed a unilocular lesion with smooth and sclerotic edges, measuring 19.72x34.88x22.00 (APxMLxSI) mm, extending from the mesial aspect of 32 to tooth 36 in the mandible. Diffuse calcified foci were observed within the lesion.

The patient underwent surgery under general anesthesia for extraction of impacted tooth number 33, enucleation of the cyst and the calcified foci. The pathological diagnosis revealed the presence of odontogenic keratocyst associated with complex odontoma. After 4 months of follow-up, no recurrence was observed.

Conclusion: Hybrid lesions involving odontogenic keratocyst and odontoma are rare, and treatment modalities typically involve total excision or marsupialization. Long-term follow-up is needed in terms of recurrence.

Keywords: Hybrid lesions, Odontogenic Keratocyst, Odontoma

PP-013

Surgical Extraction of an Unilateral Kissing Molars Class II: A Rare Case Report

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Objective: The term 'Kissing Molars' was first described by Van Hoof in 1973. It is an extremely rare clinical condition and it refers to multiple impacted mandibular molars within a single follicle, with roots lie in opposite directions and occusal surfaces in contact. In 2012, Gulses et al made a radiographical classification of kissing molars according to this; impaction of lower first and second molars are class I, impaction of lower second and third molars are class II and impaction of lower third and fourth molars are class III.

Case: In our case, a 20 year old male patient without any complaints referred to the Department of Oral and Maxillofacial Surgery. During clinical examination, missing left mandibular second and third molars were detected. Radiological examination revealed kissing molars in the left posterior mandibula. As a result of consultation with the Department of Orthodontics, it was decided to remove both molars. Surgical extraction of kissing molars was performed under local anesthesia. Postoperative recovery was uneventful without any complications after one week of follow-up.

Conclusion: Kissing molars is a pathological condition that requires appropriate treatment. This includes surgical extraction, orthodontic extrusion or follow-up without surgery.

Keywords: Impacted teeth, Kissing molars, Unilateral

PP-014

Horizontal Bone Augmentation using Autogenous Block Grafts and Particulate Allografts in the Severe Atrophic Maxillary and Mandibular Ridge

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Objective: Bone reconstruction for dental implants

Case: Horizontal Bone deficiencies

Conclusion: Reconstruction of horizontal bone deficiencies in the maxilla and mandibular crest using autogenous ramus block and particulate allograft is a predictable technique.

Keywords: Horizontal Bone Deficiency

PP-015

Extraction of Impacted Mandibular Second Primary Molar and Mandibular Second Premolar Teeth: A Case Report

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Objective: This presentation includes a case report of the extraction of impacted the mandibular second primary molar and the mandibular second premolar teeth associated with the mental nerve and the mandibular nerve for ortodontic treatment purposes. Studies have shown that the incidence of impacted molars in systemically healthy individuals is very rare. The percentage of this situation is 0.17%(0.03% primary, 0.14% secondary).

Case: In this case, the patient was a 16 year old systemically healthy girl. The teeth were localized in the bone of right posterior mandibular bone and the second primary molar was associated with the mandibular nerve and the mental nerve. As a result of the computed tomography examination, a full thickness triangular flap was removed from the right posterior buccal region with an intraoral incision under local anesthesia. The teeth were exposed by removing some bone with the help of a surgical handpiece. The second primary molar was extracted by splitting due to its associated with the mental nerve and the mandibular nerve. Corticosteroid was applied locally to the mental nerve and its surroundings and then the flap was sutured. After the operation, the patient was called four times at two-day intervals for control and dressing.

Conclusion: It was observed that all periodontal tissues healed after extractions of the teeth, and the mental nerve parasthesia caused by trauma and edema disappeared with the drugs prescribed in the postoperative period.

Keywords: Impacted, Mental Nerve, Primary Molar Tooth

PP-016

Unusual Presentation of Complex Odontoma: A Case Report of Eruption in the Maxillary Tuber Region

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Objective: Odontomas, the most common odontogenic tumors of the jaws, typically exhibit asymptomatic slow growth and non-aggressive clinical behavior. However, their eruption into the oral cavity is rare and can result in pain, inflammation, and infection of adjacent structures and may prevent the eruption of related teeth; hence, it is beneficial to promptly remove the lesion. Here, we aimed to present the diagnosis and treatment of a rare case of a complex odontoma located in the tuber region of the maxilla, which erupted intraorally.

Case: A 27-year-old healthy male presented with pain in the left upper jaw. Intra-oral examination revealed a brown-yellowish hard mass in the tuber region, with the surrounding tissues appeared inflamed. Clinical and radiological assessment led to a diagnosis of an erupted complex odontoma. The mass was successfully excised and histopathological analysis confirmed the diagnosis. Post-operative follow-up showed no complications, and the wisdom tooth adjacent to the odontoma extruded three months after surgery.

Conclusion: Given that most recorded odontomas are intra-osseous lesions with only a few cases of odontoma eruption in the oral cavity, the current case is significant due to its substantial dimensions in the left maxillary region and its eruption within the oral cavity.

Keywords: odontogenic tumors, erupted complex odontoma, oral pathology

PP-017

Diagnosis and Management of Florid Cemento-Osseous Dysplasia: A Case Report

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Objective: Cemento-osseous dysplasia (COD) describes a group of benign, asymptomatic, and slowly progressing lesions. Among fibro-osseous lesions, COD is commonly encountered and is termed florid cemento-osseous dysplasia (FCOD) when it affects multiple quadrants of the jaws. These lesions, which are typically asymptomatic, are incidentally detected by radiological examination. Pain and expansion may be observed due to secondary infections. COD does not require interventional treatment unless it becomes symptomatic or reaches a significant size. Surgical excision and curettage are recommended when there is a functional or aesthetic loss. This case report presents a patient with pain in the mandible diagnosed with FCOD.

Case: A 37-year-old healthy female patient presented with pain in the right lower jaw. Clinical and radiographic examinations led to a preliminary diagnosis of florid cemento-osseous dysplasia. Bone expansion was observed in the symptomatic right posterior mandible. An incisional biopsy was taken from the symptomatic right mandibular lesion, and curettage was performed in the same session. The biopsy result confirmed the preliminary diagnosis of cemento-osseous dysplasia. It was decided to follow-up on the lesions in other quadrants. After a 6-month follow-up, no problems were observed. The patient's follow-up is ongoing.

Conclusion: Florid cemento-osseous dysplasia is a multifocally distributed, dense cementum with bone-like masses resulting from the replacement of healthy bone with a fibrous tissue matrix. Because of the avascular character of the lesion, it is highly susceptible to serious infections and osteomyelitis. Surgical treatment may be necessary in symptomatic cases. In asymptomatic cases, follow-up is recommended in the literature.

Keywords: florid cements-osseous dysplasia, fibro-osseous lesions, oral pathology

PP-018

Diagnosis and Surgical Treatment of a Nasolabial Cyst: A Case Report

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Objective: Nasolabial cysts are rare non-odontogenic lesions of the maxillofacial area. Nasolabial cysts are usually unilateral and they are more common seen in women. These lesions may be asymptomatic or they may cause nasal obstruction, pain and facial deformity.

Case: A 27-year-old female patient applied to our clinic with complaints of swelling and facial asymmetry in the left upper lip area for approximately 6 months. The patient is systemically healthy and does not use any medication regularly. In the extraoral and intraoral examination of the patient, a mass was observed in the left fossa canina region, causing swelling on the upper lip and nasal region. By palpation, the mass was found to be well-circumscribed, smooth-surfaced, painless and fluctuant. When the patient's dental tomography was examined, it was observed that there was a well-circumscribed mass extending from the nasal vestibule region to the lower left, approximately 2x2 cm in size, causing resorption in the surrounding bone tissue. Then, the patient underwent a fine needle aspiration biopsy. The presence of infected cyst fluid during the procedure confirmed that the mass was a cystic structure. The patient was planned to have the cyst completely enucleated under local anesthesia. After the cyst epithelium was completely excised, the wound area was closed primarily with 4/0 Vicryl suture. The patient was prescribed postoperative prophylactic antibiotics, analgesics and mouthwash.

Conclusion: They are rare benign non-odontogenic lesions of nasolabial region. Conservative treatment is complete surgical excision of the cyst. In surgical treatment, complete removal of the cyst epithelium is important in terms of recurrence.

Keywords: Nasolabial cyst, Nasolabial sulcus, Non-odontogenic cyst

PP-019

Intraoral Management of Displaced Root Into Submandibular Space During Third Molar Extraction

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Objective: Displacement of root fragments into adjacent anatomical areas is an uncommon complication of the removal of teeth. Mandibular anterior teeth, especially third molars, may be pushed into the sublingual space, submandibular space, pterygomandibular space and cervical spaces in the neck.

Case: A 26-year-old systemically healthy female patient. A root fracture occurred while the patient's tooth number 48 was being extracted. While trying to remove the broken root piece with a probe, it shifted towards the submandibular space. Panoramic and CBCT radiographs were used in radiological examination. In the panoramic radiograph, it was observed that the root of the right mandibular third molar tooth was displaced to the submandibular lodge. When the tomographic sections were examined, it was seen that the distal root of the wisdom tooth was displaced between the bone and lingual soft tissue in the submandibular region. After obtaining the patient's informed consent, the patient was taken into surgery under local anesthesia, and the broken piece that had escaped into the space was reached and removed.

Conclusion: While the process after root displacement is symptomatic in some patients, it may be asymptomatic in others. Surgical intervention can be postponed for 2-3 weeks to ensure fibrosis formation around the displaced root piece, but early intervention may also be necessary against the risk of infection.

Keywords: Submandibular space, Intraoperative complications, Tooth extraction Third molar

PP-020

Reconstruction of Huge Central Giant Cell Granuloma of Mandible with Iliac Graft

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Objective: In this case, excision of the lesion, which was determined to be a central giant cell granuloma by preoperative biopsy, resection of the affected segment of mandible and reconstruction with iliac graft harvested bone block were aimed.

Case: A 24-year-old woman presented to the Marmara University Dentistry Faculty Oral and Maxillofacial Surgery Department with an intraosseous lesion in the posterior region of the right mandible. The patient's anamnesis did not reveal any systemic disease, smoking or alcohol consumption. The patient complained of swelling and pain in mandibular posterior region. Preoperative biopsy revealed central giant cell granuloma. Segmental resection of the lesion was done followed by reconstruction of the resected mandible with iliac graft was implemented under general anaesthesia.

Conclusion: This case report describes the rehabilitation procedure of a patient with central giant cell granuloma of in the right posterior side of mandible. Block bone grafts taken from the iliac bone used successfully in reconstructive surgeries.

Keywords: Iliac, Reconstruction, Resection

PP-021

Dental Implant Placement Using The Modified Shell Technique for Lateral Crest Augmentation: A Case Report

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Objective: After tooth loss, both bone loss and gingival loss occur in the surrounding tissue. This may be accompanied by trauma or pathologies. Nowadays, various grafting methods have been developed for these losses. Khoury presented a new method for the grafting of ridge defects in 2007. This technique involves the use of thin cortical plates taken from the ramus and spongiöse bone from the same recipient site is placed between the two cortical layers with the 'sandwich' technique. In this case, we grafted both cancellous spongiöse bone particles and allograft between the two cortical layers.

Case: A 52-year-old female patient presented to our clinic for rehabilitation of missing teeth in her mandible. Cone beam computed tomography (CBCT) revealed a horizontal bone defect in the left posterior region of the mandible leading to loss of alveolar bone. Grafting surgery with khoury technique was planned for the patient. The bone plates were fixed to the buccal region with fixation screws and filled between the two bone walls using a combination of autogenous and allogeneous graft particles. Six months after the initial surgery, a dental implant (brand name: megagen anyone) was placed in the grafted areas. The patient underwent prosthetic rehabilitation 9 months after the implant surgery.

Conclusion: Nowadays, in cases of horizontal alveolar crest insufficiency in dental implant placement, bone augmentation surgeries can be used to rehabilitate the areas and make prostheses that patients can use.

Keywords: Augmentation, dental implant, shell technique.

PP-022

Secondary Impetigo at Prominant Area of the Chin: A Case Report

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Objective: Impetigo is a highly contagious infection of the skin's surface that commonly affects children between the ages of two-five, although it can occur in people of any age. There are two types of impetigo based on their pathogenesis: non-bullous and bullous. The non-bullous type can be a result of the host's response to the bacterial infection, while the bullous type is mostly caused by staphylococcus aureus, although it can also be activated by a secondary infection such as herpes simplex.

Case: This case report, we describe a 26-year-old female patient who underwent bimaxillary orthognathic surgery without genioplasty and didn't have other diseases. After surgery, patient received routine postoperative care, including a Barton bandage. 24 hours later, an erythematous macule was observed on the most prominent area of the chin where the bandage was applied. Barton bandage was removed, and lesion was closely monitored. On the 3rd to 4th day after the surgery, a small, thin-walled vesicle formed with seropurulent discharge. Patient was then consulted by a dermatologist, who diagnosed the lesion as nonbullous impetigo in conjunction with herpes simplex infection. Patient was treated with systemic acyclovir and topically administered 2% mupirocin pomade. Lesion was subsequently resolved.

Conclusion: Impetigo is a skin condition that can be treated with the help of topical and systemic antibiotics, as well as local disinfectants. However, if the lesions are activated with secondary herpes simplex virus infection, they may become more resistant to treatment. In such cases, systemic antiviral medication should be considered in the treatment of it.

Keywords: impetigo, herpes simplex, orthognathic surgery

PP-023

The New Generation of Subperiosteal Implants for Patient-Specific Treatment of Maxillary Defect after Oncological Resection: A Case Report

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Objective: Subperiosteal implants introduced in the last century used as an alternative to regenerative procedures. Modern diagnostic imaging, digital technology, and direct metal laser sintering allow for the projection of implants with the proper extension, leading to fabrication of custom-made titanium meshes that perfectly fit specific anatomical requirements of patients. With modern production methods, subperiosteal implants have been digitally reinterpreted, and interest in them is being renewed for the treatment of edentulous patients with atrophic arches.

Case: A 54-year-old male patient referred to our department 4 years after total maxillary resection. The patient's primary complaints were inability to eat and excessive movement of the obturator because all dental arch was resected with the diagnosis of HANC. The patient underwent clinical and radiological evaluation, and a subperiosteal implant was recommended. High-resolution computed tomography using 0.5 mm thin slices and plaster models was used to plan the optimal position of the dental crowns. The DICOM files obtained from the CBCT were imported into software to create three-dimensional (3D) models of the residual bone anatomy in a patient. Virtual surgical planning (VSP), stereolithographic models (STL) and custom-made titanium meshes (CAD/CAM) were designed before surgery to enable both vertical and horizontal reconstruction of the maxillary defect. Endosseous implants were adapted to subperiosteal implant. The surgery was performed under general anaesthesia and nasotracheal intubation. Overdenture was made.

Conclusion: Customized subperiosteal titanium maxillary implants (CSTMI) are a safe alternative treatment option for huge maxillary defect reconstruction, allowing for simultaneous dental rehabilitation while restoring midface projection.

Keywords: Subperiosteal Implant, Head and Neck Cancer, Overdenture

PP-024

Gorlin Goltz Syndrome Diagnosed With the Help of 3 Unilocular Odontogenic Keratocysts

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Objective: Odontogenic keratocysts are cysts of dental lamina origin that expand anteroposteriorly within the medullary cavity of bone without visible bone expansion. They are most commonly seen at the mandibular posterior region as usually unilocular small lesions, whereas large lesions tend to appear multilocular. Gorlin Goltz syndrome (GGS) is an autosomal dominant condition caused by mutations in the PTCH gene. It is characterized by multiple basal cell carcinomas, odontogenic keratocysts, ocular hypertelorism and changes in the skin and skeleton.

Case: In this case report, a 41-year-old systemically healthy male patient is presented with unilocular radiolucent lesions surrounded with cortical borders in the posterior right maxilla and posterior right and left mandibular quadrants. The patient was clinically asymptomatic and lesions were nonexpansive. It was decided to enucleate the lesions under general anesthesia with a preliminary diagnosis of odontogenic keratocysts. Postoperative histopathologic examination confirmed the diagnosis of odontogenic keratocyst for all three lesions. The patient was consulted to Hacettepe University Medical Genetics and Hacettepe University Skin and Venereal Diseases departments with the suspicion of GGS. As a result of the dermatologic examination, the biopsy taken from the lesion was diagnosed as "Basal-cell-carcinoma".

Conclusion: Life-threatening tumors can be seen at GGS can cause such as meningioma and medullablastoma, in addition to its manifestations on the skin and different bones. Detection of keratocysts plays an important role in the early diagnosis of the syndrome. For this reason, close follow-up when keratocysts are encountered and genetic screening in case of matching clinical findings are recommended in the literature.

Keywords: Gorlin Goltz Syndrome, Odontogenic Keratocyst, Oral Pathology

PP-025

Analysis of Pathologic Lesions in Oral and Maxillofacial Surgery: A Comprehensive Study on Demographics, Types, and Diagnostic Accuracy

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Objective: The study aimed to report the demographic and clinical characteristics of jaw lesions diagnosed and to evaluate the accuracy of surgeons' preliminary diagnoses. **Materials-Methods:** Demographic data of 312 pathologic lesions were collected from January 2023 to 2024 for in the Oral and Maxillofacial Surgery Department. Initially, the lesions were categorized into two primary groups: odontogenic and non-odontogenic lesions. Subsequently, these groups were further stratified into tumoral and cystic subgroups. Moreover, a detailed examination was conducted on the physicians' preliminary and pathologic lesions' final diagnoses.

Results: 219 were identified as odontogenic, and the remaining 93 were non-odontogenic. Among the odontogenic lesions, 142 were cystic, and 12 were tumoral. Within the cystic formations, 78 were radicular cysts, 8 were residual cysts, 36 were dentigerous cysts, and 26 were keratocysts. 39 radicular cysts were found in maxilla and 39 in mandibles. Among the 36 dentigerous cysts, 28 were found in mandibles and 8 in maxilla. Among the 24 keratocysts, 18 were found in mandibles and 6 in maxilla. Ninety-three non-odontogenic lesions were identified, including 56 benign tumoral formations, seven cystic formations, four white lesions, and three malignant tumoral formations.

Conclusion: In this study, 164 lesions were observed in the mandible and 119 in the maxilla. This suggests that lesions occurred more frequently in the mandible. The most commonly observed lesion was a radicular cyst, followed by the dentigerous cyst. The study found a diagnostic accuracy of 92% between the preliminary and final diagnoses of the evaluated lesions.

Keywords: odontogenic cyst, odontogenic tumor, pathologic lesions

PP-026

Repair of Oroantral Fistula due to Bisphosphonate Necrosis with Buccal Fat Pad

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Objective: In this case, we closed the oroantral fistula, which was the main complaint of the patient, with buccal fat pad.

Case: In the anamnesis of the patient who was admitted to our clinic, oroantral fistula due to bisphosphonate was detected and clinically the patient had post nasal discharge. after the clinical and radiological examination, the patient's oroantral fistula was closed with buccal fat pad.

Conclusion: buccal fat pad is a successful treatment method that can be used in such large oroantral fistulas.

Keywords: bronj, bichat, fistula

PP-027

Oral Fibrolipoma: A Case Report

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Objective: Fibrolipoma is a benign tumor that is a histological variant of lipoma. It occurs in approximately 1.6% of facial lipomas. It often presents as a soft, smooth-surfaced nodular mass that is well-circumscribed, thinly encapsulated, smaller than 3 cm in size, and may occur sessile or pedunculated in the buccal mucosa. In this case report presents a rare fibrolipoma in the oral region.

Case: A 49-year-old, systemically healthy male patient was admitted to our clinic with a painless swelling on the cheek for 1 year. In the clinical examination, a fibrotic lesion with a size of 2.5x2, with a smooth surface, painless, with the same color as the oral mucosa, developing from the left buccal mucosa was detected. No radiological findings were observed. The lesion was taken by excisional biopsy under local anesthesia and sent to pathology department. The diagnosis of fibrolipoma as a result of histopathological examination.

Conclusion: The treatment of rare fibrolipomas in the oral mucosa is usually surgical excision. The recurrence rate is rare. Accurate histopathological examination is important for a successful treatment plan and to prevent malignant transformation.

Keywords: Fibrolipoma

PP-028

Odontogenic Keratocyst: A Case Report with Nine-Year Follow-Up

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Objective: The odontogenic keratocyst (OKC) is a distinctive form of a developmental odontogenic cyst because of its specific histopathologic features, an aggressive biologic behavior and a high recurrence rate. OKCs demonstrate a well-defined radiolucent area with smooth and often corticated margins. Large lesions may appear multilocular. Definitive diagnosis relies on histological examination. Long-term follow up is mandatory for successful treatment.

Case: In this study, a case of a 36 year-old patient with a multilocular OKC located in both anterior and left posterior region of the mandible was presented. After confirmation of the lesion, treatment was made by enucleation after marsupialization for a while. During the 9-year follow up period of the patient, the lesion recurred in the 3rd and 7th years after the initial surgery.

Conclusion: This study describes a case of an OKC located in mandible including its treatment, development of recurrence, and a 9 year-follow up. Clinical and radiographic follow-up is mandatory for years after surgery, because recurrence of this lesion may occur even years later.

Keywords: odontogenic keratocyst, panoramic radiograph

PP-029

Anterior Maxillary Odontogenic Cysts: Three Case Reports with Ultrasonography and Conventional Radiographic Findings

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Objective: The jaw is a common anatomical site for the development of odontogenic and non-odontogenic lesions. Because of the wide variation of these lesions, the diagnosis is complex. Conventional radiographs play an important role in the detection, treatment and follow-up of bone lesions. The use of ultrasound is of importance in evaluating the solid and cystic components of jaw lesions.

Case: This study describes three cases of odontogenic cysts located in the anterior region of the maxilla. After the confirmation of the lesions based on their symptoms, clinical and panoramic and occlusal radiographic findings, an ultrasound examination was performed in all patients to detect the lesions and to evaluate their content, size, and the relationship with anatomical structures. All lesions had a radiolucent appearance with well-defined borders in panoramic and occlusal radiographs. The ultrasound examination showed cystic appearance with internal echoes. Vascularization was not detected at the colour and power Doppler ultrasound in all three lesions. In all cases, the surgical excision of the lesions was performed and the specimens were submitted for routine histopathologic examination. Two lesions diagnosed as radicular cyst and one was residual cyst.

Conclusion: Ultrasound can provide accurate information on the content of odontogenic cysts before any surgical procedure and recommended as a complementary imaging modality for bone lesions.

Keywords: odontogenic cyst, ultrasonography

PP-030

A Case Report: Ameloblastic Fibroma

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Ameloblastic fibroma is a rare benign odontogenic tumor containing epithelial and connective tissue components, usually seen in the 2nd decade. The patient in this article applied to our clinic with the symptoms of pain and numbness that he sometimes felt in his left lower jaw, and a lesion involving teeth number 36-37 and extending up to the mandible ramus was detected in his panoramic x-ray. Teeth 36-37 associated with the lesion were extracted while preserving the mandibular nerve, and the lesion was removed by enucleation + curettage and sent to pathology. According to the pathology results, it was determined that the lesion was ameloblastic fibroma. The patient was followed up regularly for recurrence. In this case report, the ameloblastic fibroma case is described clinically, radiographically and histopathologically, and the possibility of recurrence and treatment protocol are discussed under the literature information.

Keywords: ameloblastic fibroma, odontogenic tumor, ameloblastic fibroodontoma

PP-031

Reconstruction of Atrophic Mandible with Iliac Graft: Case Report

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Objective: The use of autogenous block bone grafts is a proven and predictable method for dental implant placement in the maxilla and mandible. Block bone grafts may be preferred over other techniques (distraction osteogenesis, interpositional grafts). Smaller cortical blocks can be harvested from the symphysis and ramus. Consequently, sufficient amounts of autogenous block grafts can be obtained from bones such as the tibia, iliac crest, and rib for reconstruction. In cases where there is significant bone deficiency, anticipated chewing load corticocancellous iliac crest grafts are often preferred.

Case: After clinical and radiographic examination, it was observed that a 42-year-old female patient with no systemic diseases had horizontal bone deficiency in both the posterior and anterior regions of the mandible. The width of the mandibular ridge was measured to be 2-3 mm along its length on CBCT images. Due to the perceived inadequacy of grafts from intraoral sites, it was deemed appropriate to use an extraoral iliac bone graft. Under general anesthesia, a block-shaped bone graft and bone particles were harvested from the iliac bone during the operation. The block bone grafts were fixed with screws. Gaps were filled with particulate grafts. The surgical site was sutured, closed. After regular check-ups, implant surgery was performed on our patient in the 4.month under local anesthesia.

Conclusion: In atrophic jaws, various intraoral techniques such as Khoury, Sausage have been introduced to promote bone formation. However, in advanced cases of atrophic jaws, iliac grafting may be a preferable option to achieve sufficient bone width.

Keywords: Atrophic mandible, Iliac graft, Reconstruction

PP-032

Treatment of Radicular Cyst with Marsupialization: A Case Report

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Objective: Radicular cyst is inflammatory in origin and seen more frequently in permanent dentition and seldom in primary dentition. In the periodontal ligament, the remnants of the epithelial root sheath of cell rests of Malassez proliferate to form the cyst wall. Radicular cysts can develop in permanent and primary teeth having an apical infection due to caries. In the early stages, the radicular cyst might be asymptomatic, however, if not treated, it may eventually cause bone expansion, resorption of bone, delay in the eruption of tooth, change in tooth position and tooth mobility. A radicular cyst can be treated either by total enucleation, marsupialization, and decompression or both. These cysts rarely recur if treated adequately. This paper presents a case of radicular cyst in children, which was managed conservatively.

Case:

Conclusion:

Keywords: Marsupialization, Radicular cyst

PP-033

Corneal Abrasion After Temporomandibular Joint Surgery Performed Under General Anesthesia

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Objective: Corneal abrasion is the most common ophthalmologic complication in patients under general anesthesia for nonocular surgery. In maxillofacial operations, this rate may increase due to the proximity of the operation site to the eye. In this case, corneal abrasion that developed after the surgical treatment of a condyle fracture in the temporomandibular joint (TMJ) under general anesthesia (GA) is presented.

Case Report: A 37-year-old female patient was referred to our clinic due to trismus after a fall. Clinical and radiologic examination revealed a fracture of the left condyle and the fracture was treated with open reduction under GA. Six hours after the operation, patient complained of burning and stinging pain in the left eye and swelling around eye. The patient was consulted to ophthalmology department and was diagnosed with corneal abrasion, and topical anesthetic drops containing proparacaine HCL were instilled into the eye. The patient's pain resolved but the swelling was still present. Artificial tears and 5 mg moxifloxacin eye drops were prescribed. After three days, the swelling decreased and pain ended.

Conclusion: Although ocular symptoms in the postoperative period are relatively common in nonocular surgery, there are not enough studies. Additionally, there are no cases in the literature reporting corneal abrasion after TMJ surgery. Working under GA and in the head-neck region, and working hypotensive, supine position and long operation times are risk factors for corneal abrasion in TMJ surgeries. Surgeons and anesthesiologists should know the risk factors, investigate the causes and take the necessary precautions to prevent.

Keywords: Complication, corneal abrasion, general anesthesia

PP-034

Removal of the Mandibular Third Molar Tooth Root Displaced in the Submandibular Space with an Intraoral Approach Under Local Anesthesia

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Objective: Extraction of third molars is one of the most common surgical procedures in oral and maxillofacial surgery. After third molar surgery, common complications such as excessive bleeding, jaw fracture, nerve injury, infection, pain, swelling and rare complications such as displacement of teeth or roots to adjacent anatomical areas may occur. This case reveals intraoral management of accidental displaced mandibular third molar root into submandibular space under local anesthesia.

Case: A 37-year-old male patient applied to our clinic with complaints of mild decay and pain in his left mandibular third molar tooth, and an indication was given for extraction. The distal root of tooth fractured during extraction and root fragment was lost in the socket while trying to remove it. Panoramic radiography and cone-beam computed tomography (CBCT) revealed the position of displaced root in submandibular space. Following this, it was planned to retrieve the tooth from submandibular space via intraoral submandibular approach under local anesthesia and the patient was informed about the treatment and his consent was obtained.

Conclusion: Detailed clinical and radiological evaluation, use of correct instruments and careful surgical technique before third molar tooth extraction will reduce the risk of such complications. In cases where tooth or root fragment is displaced to adjacent anatomical space, the exact location of the tooth must be determined using CBCT or high-quality radiography. This complication needs to be managed by experienced oral and maxillofacial surgeons who have sufficient technical knowledge and skills to prevent undesirable complications.

Keywords: root displacement, submandibular space, third molar

PP-035 Management of Ankyloglossia in an Adult Patient: A Case Report

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Objective: Ankyloglossia describes limitations of tongue's motor activity due to the embryological malformation of the lingual frenulum (LF). The management of ankyloglossia is surgical in an adult patient. Surgical management poses minimum risks and complications but may include bleeding, airway obstruction, damage to surrounding structures and scarring. Post-operative speech therapy is advised for at least four weeks in adult patients to help develop new muscle movements, to correct well- established compensatory movements and to prevent scar formation.

Case: A 41-year-old female was referred with chief complaints of disability to move her tongue freely and difficulties in speech. Her intraoral examination revealed severe ankyloglossia, according to Kotlow's classification. The treatment option of frenuloplasty, the need for post-operative tongue exercises and speech therapy were discussed with the patient. Relevant tissues were locally anesthetized, and a silk suture was placed in the tip of tongue to reflect and expose the LF. The LF was released with a scalpel and blunt dissection was performed. Increased tongue protrusion was observed immediately intraoperatively. The surgical field was approximated with 4/0 resorbable sutures. Post-operatively the patient was instructed on tongue exercises. The healing process proceeded without complications. The tip of the tongue was freely able to touch the incisor edges of the maxillary central incisors during follow-up.

Conclusion: Ankyloglossia may restrict patients' ability to move the tongue freely and interfere with proper speech. Frenuloplasty is an effective and highly reliable procedure for achieving complete functional release in ankyloglossia cases but should be supported with speech-therapy and tongue exercises.

Keywords: Ankyloglossia; frenuloplasty; tongue-tie

PP-036

Comparison of The Stress Distribution with Different Subperiosteal Implant Designs in The Atrophic Maxilla Using 3d Finite Element Analysis

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Objective: Nowadays dental implants become the main option for the rehabilitation of edentulous patients. However in case of severely resorbed jaw, the available bone might be insufficient for dental implant placement. Although bone augmentation or zygomatic implants can be a choice to rehabilitate jaws, due to high cost, length of surgery and overall treatment time, the use of subperiosteal implants seems to be alternative in patients with atrophic jaws. The aim of these study was to compare stress values between two different subperiosteal implant designs using 3D finite element analysis.

Formun Altı

Material -Methods: A model obtained from the tomographic data of a patient with advanced maxillary resorption was virtually constructed. Two different subperiosteal implant designs and two different prosthetic infrastructure (chrome cobalt alloy and polieter- eter ketone material) were produced. 200 N occlusal forces was applied to the structure and stress values were recorded.

Results: Models with PEEK infrastructure showed the highest cortical and von mises stress values when compared to the values in chrome cobalt base. The highest stress was observed with occlusal screw in all models. Von mises stress values in all screws of Y-shaped groups were higher than the screws in I-shaped groups.

Conclusion: It can be concluded that stress values are primarily influenced by the designs of the implant and infrastructure materials.

Keywords: Subperiosteal implant, finite element, design

PP-037

Odontogenic Keratocyst of the Posterior Mandible: A Case Report

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Objective: Odontogenic keratocyst (OKC) is the most aggressive and asymptomatic cyst that develops from dental lamina remnants of the tooth or primordial odontogenic epithelium. It has high recurrence rate. The incidence of mandible is higher than maxilla. The aim of this case presentation is to demonstrate the treatment and follow up process of a patient with OKC in the mandible, who underwent enucleation following marsupialization.

Case Report: A 69-year-old male patient applied to our clinic with the complaint of infection and pain in his mandible. Radiographic evaluations of the patient demonstrated a well-demarcated, multilocular radiolucent lesion in the posterior mandibular region. The patient underwent a biopsy which subsequently confirmed the diagnosis of OKC. Marsupialization was performed with the placement of a drainage tube due to large size of the cyst. The patient was followed up for 5 months. Postoperative care and oral hygiene practices have been consistently reiterated. During the follow up sessions, it has been observed that the lesion gradually decreased in size and at the end of this period, enucleation was conducted. The patient is currently under ongoing surveillance.

Conclusion: The odontogenic keratocyst is characterized by its aggressive behavior, typically manifesting as expansive lesions in the posterior mandible, often devoid of symptoms, while posing a risk of invasion and recurrence. The therapeutic approaches are contingent upon the dimensions of the lesion. This case provides an important example of successful enucleation following marsupialization for extended cysts.

Keywords: Enucleation, Marsupialization, Odontogenic keratocyst

PP-038

Multiple Odontojenik Keratocyst: A Case Report

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Odontogenic keratocyst was first mentioned in the literature by Mikulicz in 1876, and described by Philipsen in 1956; In this case, we presented odontogenic cysts founded on the apical area of the mandibular incisor teeth and the apical area of the left maxillar incisor teeth which belong to 23 years old male patient. On the panoramic radiograph, a single-chambered lesion with well-defined boundaries was seen between the teeth from the left mandibular second premolar to the right mandibular first molar. This radiolucent appearance lesion includes an impacted canine. A unilocular radiolucent lesion was found in the apical area of the left maxillar incisor as a result of the panoramic X-ray. As a result of the Cone Beam Computed Tomography (CBCT) examination, significant destruction was observed in the buccal and lingual cortex associated with the lesion. Fine needle biopsy and incisional biopsy were made to lesions to make a diagnosis. Under general anaesthesia, the enucleation and curettage of the cyst were performed while preserving the patient's healthy bone tissue. During the operation, an excisional biopsy was made. Biopsy specimens were sent to the pathology laboratory. In the pathology report, specimens were seen as infected odontogenic keratocysts. The patient was sent for a medical genetic examination because multiple odontogenic keratocysts were detected in his mandibular and maxillar jaws. Despite the presence of multiple odontogenic keratocysts, it could not be associated with the Gorlin Goltz syndrome.

Keywords: Cyst, Gorlin Goltz, Keratocyst

PP-039

Non-Syndromic Multiple Keratocyst: A Case Report

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Objective: Odontogenic keratocyst is defined as an intraosseous cyst, which is seen as a benign, unilocular or multilocular cyst in the jaws, which is caused by the lamina of the teeth or primordial odontogenic epithelium. Odontogenic keratocyst has unique features such as local aggressive behavior, high recurrence rate and differential histological appearance.

Case: A 26-year-old female patient applied to our clinic with the complaint of pain in the left lower jaw area. It was learned that there was no systemic or genetic disease in the anamnesis taken from the patient. Intraoral examination revealed buccal and lingual bone enlargement in the left mandibular molar region. It was observed that the patient did not show any symptoms of acute infection. When the panoramic radiograph of the patient was examined, multilocular, well-defined, radiolucent areas covering the left mandibular angulus and ramus region and the right maxilla posterior region were observed. In dental tomography images, it was observed that the cystic structure occasionally caused melting in the buccal bone. First, aspiration biopsy was performed on the mass, which was diagnosed as keratocyst based on clinical and radiological findings. Aspiration biopsy confirmed that the mass was a cystic pathology. The patient underwent surgery under general anesthesia for enucleation of the pathological mass. As a result of histopathological examination, the mass was diagnosed as keratocyst.

Conclusion: Differential diagnosis of keratocysts from nonodontogenic and other odontogenic jaw cysts should be made. Recurrence is frequently observed in these cysts, which require surgical enucleation for treatment.

Keywords: Multiple Odontogenic Keratocysts, Enucleation, Recurrence

PP-040

Miniplate Application for Prevention of Mandibular Fracture Followed by Enucleation of Dentigerous Cyst: A 3D Model Based Case Report

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Objective: Dentigerous cyst is the most common pathological entity of the maxillofacial region. It presents as a well-defined unilocular radiolucency around the crown of a fully impacted tooth. Dentigerous cysts are asymptomatic small lesions in general but some of them may grow considerable size and weaken the jaw bone. Large lesions treated with enucleation might predispose the patient to an increased chance of pathological fracture of the mandible. Prophlactic miniplate application was performed after enucleation in a patient with inadequate bone support due to large dentigerous cyst in this presented case.

Case: A 75-year-old male patient was referred to our department with complaint of swelling in the right posterior mandible. CBCT images showed resorption of the roots of adjacent teeth and reduced bone support in the posterior corpus of the right mandible due to well-defined radiolucent lesion associated with an impacted third molar tooth. A 3D resin study model was designed and prepared with additive manufacturing. Miniplate was applied on this study model. Preoperative incisional biopsy revealed a dentigerous cyst. Teeth with root resorption were extracted and the lesion was enucleated in the same operation. A prophlactic miniplate was applied on external oblique line in accordance with Champy's lines. Regeneration of the bone defect was observed in postoperative 10 month CBCT. Two dental implants were performed in the same operation as the miniplate removal.

Conclusion: Miniplate applications may have considered after enucleation of the large cysts for prevention of pathological fracture.

Keywords: dentigerous cyst, enucleation, miniplate application

PP-041 Complications in Retromandibular Approach and Case Report

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Objective: Retromandibular approach is from used for ramus fractures, parotid surgeries, condyle-subcondyle fractures and condyl-related prosedures.

In the retromandibular approach, the anatomical structures that require attention are the facial nerve and the retromandibular vein.If unexpected complications arise concerning these anatomical formations, isolating the area during dissection stage can help to control the situation."

Case: A 25-year-old male patient without any systemic diasease presented to our clinic with complaints of swelling and pain in the right ramus region. Clinical and radiographic examinations revealed a fracture in the right subcondylar region."

The patient was placed under general anesthesia, and access to the fractured area was achieved using the retromandibular approach."During the procedure, the fractured area was exposed by dissection, previously.Traction was applied for proper alignment of the displaced segment, with a 14-gauge needle inserted below the corpus mandible.At this stage, an unexpected complication occurred with damage to the retromandibular vein.The area was visible during the procedure, the vein was clamped and ligated.After achieving hemostasis, the fracture line was identified and rigidly fixed. The operation was successfully completed."

Conclusion: In extraoral approaches, needle damage during the procedure, trauma due to dislocation, or retro-mandibular vein injury during drilling are possible occurrences. In cases where unexpected complications such as these occur during regional dissection, the relevant vein can be clamped and vessels ligated to achieve hemostasis.

Keywords: Retromandibular vein, Retromandibular approach, Condyle fracture

PP-042

Proliferative Verrucous Leukoplakia: A Case Report

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Objective: Proliferative verrucous leukoplakia (PVL) is a unique form of multifocal oral leukoplakia, distinguished by its progressive clinical course and evolving clinical and histopathological characteristics. Clinical presentation of PVL is white plaques that affect multiple oral sites with a verrucous pattern and lesions may show lichenoid appearances. PVL has a high rate of recurrence and malignant transformation risk.

Case: A 50 year-old male patient was referred to our Department of Oral and Maxillofacial Surgery, for white lesions present on the dorsal and ventral surfaces of the tongue and the bilateral buccal mucosa. The patient did not have any complaints and the lesions were observed during routine examination. The patient has a history of rheumatoid arthritis and allergic rhinitis. After the examination, we performed excisional biopsy on the dorsum of the tongue due to the lesion's highly dysplastic appearance. The pathology report stated mild, moderate and severe dysplasia. The patient was scheduled for regular follow-ups. We performed multiple biopsies throughout the 2 years of surveillance period. This 2-year follow-up and treatment process will be explained in the poster presentation.

Conclusion: PVL patients have high risk of cancer development. Therefore patients who presents with multifocal disease should undergo multiple biopsies from different sites. If the biopsy reports state dysplastic changes, patients must be examined at regular intervals with histopathological examination until a malignancy develops.

Keywords: Dysplasia, Oral Potentially Malignant Disorder (OPMD), Proliferative Verrucous Leukoplakia (PVL)

PP-043

Zygomatic Implant Treatment in The Edentulous Mouth

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As a result of periodontal or endodontic diseases; local and systemic factors such as tooth extractions, early tooth loss, tumor resections, traumas, some type of developmental anomalies may lead to bone resorption in maxilla. Jaw bones that have resorption, the retention and resistance of the prosthesis is negatively affected which disrupts the stabilization of the prosthesis and reduces the patient comfort. For these reasons, zygomatic implants were introduced by Branemark in 1998 as an alternative treatment option for patients with substantially atrophic maxilla. In the searches conducted by different writers, the survival and success ratio of zygomatic implants reported high in literature. In this case presentation 36 year-old male maxillary edentulous patient with history of long-term prosthesis use applied to our clinic with a desire for improved prosthesis retention and a request for fixed prostheses. After evaluating the patient's blood tests and CBCT image, total of 2 zygomatic implants were placed where the level of teeth 24 and 14, under general anesthesia. Increasing the retention, dental implants were placed in the regions of teeth 12, 22, and 18. In the same day temporary fixed prosthesis were placed with surgical procedures. The patient also have got oral epulis fissuratum. After the osseointegration is complete, epulis fissuratum are removed with diode lasers and vestibul deepening is made at the same session. The patient is given the new total prosthesis after 2 weeks of soft tissue healing. This case report's purpose is to give newsworthy information about a zygomatic implantation made in an edentulous mouth.

Keywords: edentulous mouth, resorption, zygomatic implants

PP-044

Treatment of a Large Calcifying Epithelial Odontogenic Tumor with Tube Decompression: A Case Report

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Objective: Calcified epithelial odontogenic tumor (CEOT) is a very rare, benign, epithelial-derived lesion that constitutes 1% of all odontogenic tumors (OTs) that present as an asymptomatic, painless, slow-growing swelling. Treatment of OTs by decompression /marsupialization is not common but this method can be used in tumors with a cystic formation. Here, we reported the treatment of a large CEOT in a 70-year-old woman by decompression and enucleation.

Case: A 70-year-old woman was referred to our clinic with the complaint of painless swelling in the right mandible. Intraoral and extraoral examination revealed an expanding swelling in the right mandible and facial asymmetry. Panoramic radiography revealed a large, multilocular radiopaque-radiolucent lesion starting from the left parasymphysis to the right ramus. On CBCT, there was a multilocular, septate, radiopaque-radiolucent-looking lesion with cystic formation causing thinning, destruction and expansion in the lingual and buccal cortical regions. An incisional biopsy and decompression with a tube was done. The lesion, which was diagnosed as a CEOT in the biopsy, was followed by irrigation. A significant reduction in lesion size and ossification within the cystic structures were revealed at the 6-month follow-up. After decompression lesion was enucleated under general anesthesia and was diagnosed as a CEOT.

Conclusion: Enucleation, curettage and resection are used in the treatment of OTs. Some OTs may include cystic patterns within a solid form. As in this case, decompression and enucleation in the treatment of OTs with cystic pattern can be used to reduce the size of the lesion and protect vital tissues.

Keywords: calcified epithelial odontogenic tumor, marsupialization, enucleation

PP-045

Surgical Treatment of Rare Mural Variant of a Unicystic Ameloblastoma: A Case Report

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Objective: Ameloblastoma is most common benign odontogenic tumor with local invasion and high recurrence, which generally occurs in the jaw bones. Unicystic ameloblastoma is a specific type of ameloblastoma presented as a unilocular radiolucent lesion with less aggressive clinical behavior than the conventional solid intraosseous ameloblastoma.

Case: A 15 year old male patient was identified with a expansive, radiolucent lesion with regular borders associated with an impacted 3rd molar in the left mandibular posterior region. The patient's anamnesis revealed that he did not have any systemic disease. The patient underwent marsupialization treatment in another hospital for 1 year. However, the patient applied to our department because he could not get results. After surgical treatment, the lesion was enucleated and sent for pathologic examination. Pathologic examination revealed that the lesion was diagnosed as the mural subtype of unicystic ameloblastoma.

Conclusion: Unicystic ameloblastoma subtype with mural variant are considered as the most aggressive type. Because it is a slow-growing, locally invasive tumor with a high risk of recurrence, the treatment strategy for ameloblastoma remains controversial. Because recurrence rates are as high as 75%-90% after conservative treatments, a wide resection of the jaw is typically recommended for ameloblastoma. On the other hand recently, marsupialization plus second-stage enucleation was reported as an effective strategy in treating unicystic ameloblastoma, a subtype of ameloblastoma with weaker invasiveness and a lower recurrence rate. In this case, the mural variant of unicystic ameloblastoma was successfully treated conservatively with enucleation after marsupialization. After 4 months of follow-up, no recurrence was observed.

Keywords: Oral Pathology, Ameloblastoma

PP-046

Giant Dentigerous Cyst Associated with an Impacted Tooth in The Jaw Bone: Two Case Report

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Objective: Dentigerous cysts are benign odontogenic cysts that are associated with the crowns of an unerupted tooth. These pathological formations are usually associated with the crown of a developing impacted or erupting tooth and they are detected during routine radiographic examinations.

Case1: A 29-year-old female patient applied to our clinic with the complaint of pain in the left upper jaw area. Intraoral examination revealed that the upper left canine tooth had not yet erupted. When the panoramic radiograph of the patient was examined, unilocular radiolucent areas covering the left maxillary canine were observed. In dental tomography images, it was observed that the cystic structure caused migration in the adjacent tooth apices and expanded the maxillary sinus posteriorly. The patient was operated under general anesthesia for the enucleation of the mass.

Case2: A 41-year-old male patient applied to our clinic with complaints of pain and swelling in the right premandibular region. Intraoral examination of the patient revealed that the lower right canine tooth had not yet erupted. On the patient panoramic radiograph, unilocular, radiolucent areas covering the lower right canine were observed. In dental tomography images, it was observed that the cystic structure occasionally caused melting in the adjacent buccal bone. The patient was operated under general anesthesia for enucleation of the cyst. As a result of histopathological examination, the mass was diagnosed as dentigerous.

Conclusion: Conclusion: Most dentigerous cysts are treated by enucleation of the cyst and extraction of the associated teeth. Large volume cysts can be treated with marsupialization. The probability of recurrence following complete removal is very low.

Keywords: Large dentigerous cyst, impacted teeth, jaw

PP-047

Mandibular Osteonecrosis Associated With Dental Implant: A Case Report

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Objective: According to the American Association of Oral and Maxillofacial Surgeons, MRONJ is defined as a serious complication characterized by non-healing, exposed necrotic bone in the jaws, developing due to the use of antiresorptive or antiangiogenic agents. The presence of intraoral or extraoral exposed bone lasting longer than 8 weeks in patients who have not received head and neck radiotherapy but have used antiresorptive or antiangiogenic drugs is an important indicator in the diagnosis of MRONJ. The 2014 report by the AAOMS provides detailed information on clinical staging and treatment options.

Case: In the clinical and radiological examination of a patient included in our study, the presence of a sequestered area with a demarcation line in the mandibular left posterior region, including a dental implant, was detected. Upon further investigation, it was understood that extraction of a tooth adjacent to the dental implant was a predisposing factor. The sequestrum and dental implant were removed using a minimal invasive technique under local anesthesia. The operation site was left for secondary healing, and after follow-up examinations, the healing process was completed without any complications.

Conclusion: MRONJ can occur in the jaws as a result of the use of antiresorptive/antiangiogenic drugs commonly used for osteoporosis treatment in post-menopausal women or for the treatment of various bone disorders and malignant diseases. A collaborative approach involving dentists, physicians, and pharmacists is believed to have critical value in preventing the development of MRONJ.

Keywords: osteonecrosis, dental implant, biphosphonate

PP-048

Nasopalatine Duct Cyst a Case Report

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Objective: Nasopalatine duct cyst is the most common nonodontogenic developmental cyst in the oral cavity. The cyst originates from embryonic epithelial remnants of the nasopalatine duct. The cyst is asymptomatic and usually detected during the routine radiological examination. Radiographically, round or oval, It is observed as a radiolucent lesion with well-defined borders. It may appear heart-shaped due to the superposition of the anterior nasal spinae. The recommended treatment is enucleation of the cyst; In the treatment of large cysts Marsupialization is recommended.

Case: A 26-year-old female patient came to our clinic saying that she had a taste of salt water in her mouth. In the radiography, An oval, well-circumscribed, radiolucent lesion was observed in the maxillary anterior region. As a result of the vitality test, it was determined that the teeth were vital. Cone beam computed tomography (CBCT) images were taken. On examination, the lesion was found in the median maxillary region, approximately 20×20×18 mm in size. It causes defects in the bone and It was determined that there was no resorption in the tooth roots. The lesion was taken out completely by preserving the cortical bone borders under local anesthesia. As a result of histopathological examination, the specimen was diagnosed with a duct cyst in the Department of Oral Pathology

Conclusion: Diagnosis of NPCCs should be made by evaluating clinical, radiological and histological examinations together. Avoid unnecessary endodontic treatment or tooth extraction to avoid, such as radicular cyst, large incisive foramen Differential diagnoses should be considered.

Keywords: Nasopalatine, Duct, Cyst

PP-049

Peripheral Giant Cell Granulom A Case Report

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Objective: Peripheral giant cell granuloma is the most common type among giant cell lesions. Although its exact etiology is not fully understood, it is associated with factors such as traumatic tooth extractions, poor dental restorations, plaque, and tartar leading to poor oral hygiene. Clinically, it typically presents as a variable-sized ulcerated mass in front of the first molar teeth, ranging from red to blue in color. Due to these characteristics, its differential diagnosis is extensive and crucial, thus histopathological examination is necessary for diagnosis and treatment.

Case: A 10-year-old female patient presented to our clinic with a painless mass complaint in the left maxillary anterior region, which had been present and gradually increasing in size for 1 year. Intraoral examination revealed a painless, sessile, non-bleeding, firm mass with ulcerated surface measuring 1x2 cm in the area of tooth 63. The patient was taken to surgery under local anesthesia. The mass was completely excised, and the defect area was left to heal secondarily. No postoperative complications occurred. No recurrence was observed during the 12-month follow-up period.

Conclusion: Peripheral giant cell granuloma (PGCG) is one of the rare reactive and exophytic lesions of the oral cavity, also known as giant cell epulis, osteoclastoma, giant cell reparative granuloma, or giant cell hyperplasia. The treatment of PGCG involves complete surgical excision of the mass and elimination of underlying etiological factors. Neglecting these oral lesions can lead to serious consequences; therefore, preventing recurrence by addressing the etiological factors and long-term patient follow-up are essential.

Keywords: giant cell lesions, maxilla, Peripheral giant cell granulom

PP-050

Ameloblastoma A Case Report

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Objective: Ameloblastoma is one of the most common benign odontogenic tumors of the jaw, accounting for approximately 10% of all tumors arising in the mandible and maxilla. It is a slow-growing but locally invasive tumor that occurs with painless swelling in the jaws. The preferred treatment method for ameloblastoma is surgery. Because of the high recurrence rate after conservative surgery, a wide resection with a 1 to 1.5 cm bone margin is recommended, especially in solid/multicystic ameloblastomas. However, a recent meta-analysis could not prove the superiority of radical surgery over conservative surgery.

Case: A 35-year-old male patient applied to our clinic with a complaint of a painless mass in his lower jaw that had been present for 1 year and was growing over time. Intraoral examination revealed a painless, immobile, hard mass measuring 5.5x3.5 cm. Radiographic examination revealed a multilocular radiolucent area in the mandibular corpus. The patient was taken into surgery under local anesthesia. The mass was completely removed, including the periosteum, by paying attention to surgical margins. First, the defect area in the mandible was stitched. No postoperative complications were observed. Acanthomatous ameloblastoma has been reported. No recurrence was observed during the 24-month follow-up period.

Conclusion: Ameloblastoma is a rare jaw tumor that should be considered in the differential diagnosis of the jaws. In the treatment of these lesions, it is appropriate to remove the mass by observing appropriate surgical margins. Patients should be followed lifelong for recurrence. It should not be forgotten that malignant degeneration may occur in recurrent patients.

Keywords: Ameloblastoma, Mandible, Neoplasm

PP-052

Deepening of The Mandibular Lingual Sulcus and The Use of an Acrylic Resin Prosthesis Fixed with Mini Screws To Maintain The Patency of The New Sulcular Depth

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Objective: Due to resorption of the alveolar process following tooth loss, the lingual frenulum and the genioglossus and geniohyoid muscles may become shallow in relation to the crest of the crest, making it difficult to stabilise conventional or overdenture-type removable prostheses. For this reason, it was aimed to deepen the shallow lingual sulcus in order to increase the stability of the overdenture prosthesis.

Case: A 69-year-old woman presented to the clinic because of the lack of stability and retention of her conventional prosthesis. An overdenture prosthesis was planned. After the implants were placed, the position of the lingual musculature was palpated near the crest crest, so sulcoplasty was planned. Firstly, an acrylic resin prosthesis was prepared after measurements were taken with polyvinyl siloxane material and necessary scrapings were made on the plaster model. Only the superior and lateral fibres of the genioglossus and geniohyoid muscles were separated from the mandible lingually. The separated mandibular fibres were sutured directly around the muscle and connective tissue and fixed with a button on the outer surface by passing a needle from the tooth surface of the mandible to the lingual. Finally, the acrylic prosthesis was fixed with mini screws. The surgical guide was removed after 5 weeks.

Conclusion: Epithelialisation of the lingual surface was observed and deepening of the lingual sulcus was achieved. The stability of the overdenture prosthesis held on 2 osseointegrated implants and patient comfort were increased.

Keywords: lingual sulcoplasty(vestibuloplasty), overdenture

PP-053

Bone Augmentation with Custom-Made Titanium Mesh and Sinus Lift Procedures: A Case Report

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Objective: After tooth extraction, the alveolar bone tends to resorb for different reasons. Alveolar bone becomes atrophic due to traumatic tooth extractions, periodontal disease, surgical operation, long-term use of a removable prosthesis or not using a prosthesis. Clinicians use various augmentation techniques for alveolar bone deficiencies before dental implant applications. Guided bone regeneration is the most frequently applied technique among these techniques. Thanks to its custom-made titanium mesh structure, it exhibits a rigid structure that is resistant to intraoral forces to prevent the resorption rate in the reconstruction of large defects and protect the contour of the augmented area.

Case: In this case report, bone augmentation with custom mesh application, subsequent sinus lift operation, and finally application of dental implants are presented to a 56-year-old female patient with a vertical and horizontal alveolar bone defect in the left maxillary alveolar bone.

Conclusion: High success was achieved with the guided bone regeneration and sinus lift procedure performed with custom-made titanium mesh clinically and radiologically, and dental implant treatment could be performed successfully.

Keywords: Bone grafts, Custom-made titanium mesh, Sinus lift procedure

PP-054 Removal of a Third Molar Displaced into the Infratemporal Fossa During Extraction

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Objective: Accidental displacement of an impacted third molar tooth into the infratemporal fossa is a rare and serious complication due to the sensitivity of the surrounding anatomical structures. This case report presents a rare complication during the extraction of the impacted third molar tooth in the right upper jaw.

Case: A 15-year-old girl was accidentally displaced into the infratemporal fossa during the extraction of the right maxillary impacted third molar which was indicated for orthodontic reasons, and the location of the tooth was confirmed using cone beam computed tomography. The relevant tooth was removed by elevation by expanding the flap and carefully dissecting the soft tissues.

Conclusion: Radiographic diagnosis using cone beam computed tomography is very useful in determining the location of the tooth. A good flap design, adequate light source, and a clear view of the surgical field facilitate the surgery.

Keywords: Infratemporal fossa, Third molar, Complication

PP-055

Conservative Surgical Treatment of Medication-Related Osteonecrosis of the Jaw: A Case Report

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Objective: Medication-related osteonecrosis of the jaw (MRONJ) is a serious drug-related side effect seen in the maxillofacial region of patients currently or previously treated with antiresorptive and/or angiogenic agents. A wide variety of treatment options for MRONJ are available in the literature, ranging from conservative treatments to a variety of invasive surgical procedures, sometimes supplemented by adjunctive treatments. In this report, conservative surgical treatment of stage III MRONJ is presented.

Case: As a result of the examination of a 62-year-old male patient who applied to our clinic with a complaint of pain in the right region of the lower jaw, signs of infection along with exposed bone were detected in the relevant area. It was learned that the patient was diagnosed with lymphoma 6 months ago and was using zoledronic acid (one dose every 15 days, IV use for 6 months). The patient was diagnosed with stage III MRONJ, considering the clinical and radiological data obtained. Following the formation of sequestra, the patient underwent sequestrectomy with a conservative surgical approach under local anesthesia. During the 5-month follow-up period, no signs of infection or dehiscence were observed in the region.

Conclusion: Medication-related osteonecrosis lesions in the jaws of patients diagnosed with cancer should be carefully evaluated by clinical and radiological examination, possible bone metastases in the jaws should be distinguished and their treatments should be carried out carefully.

Keywords: Lymphoma, Zoledronic acid, Osteonecrosis

PP-056

Traumatic Neuroma in the Retromolar Region

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Objective: Traumatic neuromas (TN) are non-neoplastic proliferations of the nerve that occur in response to an injury, usually after direct trauma or surgery. The most common intraoral TNs are found in the mental foramen, lower lip, and tongue. In this case report, we present a case of extraosseous TN in the retromolar region.

Case: A 55-year-old male patient was admitted to the outpatient clinic due to a mucosal lesion in the left retromolar region that had been growing slowly for approximately 2 years. During intraoral and radiological examination, a nodular, soft, sessile lesion, approximately 18X25 mm in size, covered with normal mucosa, was observed in the distal neighborhood of tooth 38 in the left retromolar area. No sensory changes were observed in the patient's distribution area of the trigeminal nerve. Surgical excision of the lesion was performed under general anesthesia. As a result of histopathological examination, TN was diagnosed. The patient's recovery was uneventful and the patient was monitored.

Conclusion: Retromolar TN are rare oral mucosal lesion. The preferred treatment for traumatic neuromas is surgical excision and it is important to follow up with the patient.

Keywords: Traumatic neuroma, Retromolar nerve, Cone-Beam Computed Tomography

PP-057 Chronic Suppurative Osteomyelitis Developing in the Maxilla

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Objective: Osteomyelitis is an inflammatory reaction of both cortical and medullary bone. In the maxillofacial skeleton, it can be seen more frequently in the mandible than in the maxilla. In this case, we present a case of maxillary osteomyelitis in a 46-year-old female patient, emphasizing the clinical findings, radiographic features, and treatment methods.

Case: A 46-year-old female patient applied to our clinic complaining of pain in the left maxillary area. It was learned that the patient had no systemic disease and was a smoker. In the intraoral clinical area of the patient, the presence of alveolar bone necrosis accompanied by an abscess in the left maxillary region was observed. This case, which showed destruction in the alveolar bone on CBCT images, was diagnosed as chronic suppurative osteomyelitis. Since the patient was allergic to penicillin, clindamycin 600mg (4x1) was administered for 3 months. Additionally, the patient received 40 sessions of hyperbaric oxygen therapy before the operation. After 5 months of clinical follow-up and treatment of the acute infection, sequestrectomy was performed and primary surgical closure was performed using a fatty tissue flap. No problems were observed in the 6-month clinical follow-up of the patient and the patient was kept under follow-up.

Conclusion: Osteomyelitis treatment includes both medical and surgical approaches. The use of antibiotics and hyperbaric oxygen therapy are critical in the treatment of osteomyelitis.

Keywords: Chronic suppurative osteomyelitis, Antibiotics, Hyperbaric oxygen

PP-058 Central Giant Cell Granuloma of the Mandible: A Case Report

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Objective: Central giant cell granuloma is a non-odontogenic pathological lesion that is often localized in the mandible and maxilla. Its etiology is not fully known. Clinically, it can be observed in a wide range of cases, ranging from slowly progressing, asymptomatic lesions to aggressive forms that can cause pain, local bone destruction, tooth root resorption, and tooth loss. Surgical removal of the lesion is the most common treatment method. The relapse rate is high after inadequate treatment.

Case: A 19-year-old female patient applied to our clinic with a complaint of pain in the left mandibular region. In the radiological examination, root resorption of tooth 37 and a unilocular radiolucent lesion involving the roots of teeth 37 and 38 were observed. Tooth 37 and 38 were extracted and excisional biopsy of the lesion was performed under local anesthesia. Histopathological examination revealed central giant cell granuloma. A recurrence was observed during the 3-year follow-up of the patient, and tooth number 36 was extracted along with curettage of the lesion foci. The patient's mandibular bone was observed to have healed well in the 7th postoperative month. The patient is still under follow-up for recurrence.

Conclusion: In the literature, it is seen that aggressive lesions such as central giant cell granuloma have a 72% recurrence rate. It is important to do long-term follow-up of patients.

Keywords: Central giant cell granuloma, Recurrence, Surgical excision

PP-059

Sialolith Excision from Wharton's Canal

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Objective: Salivary gland stones, as they are called sialoliths in the medical literature, are calcified formations that develop as a result of calcium accumulation in the salivary gland duct. Over time, these calcified formations can accumulate in the salivary duct and prevent saliva secretion. Although there are no definitive judgments about its etiology, it is accepted that the decrease in salivary flow, saliva composition, and pH are effective local factors in the etiology of stones. Salivary gland stones, which are generally asymptomatic, may occur with secondary infection or with symptoms such as swelling and pain during eating.

Case: This case report presents the surgical excision of a sialolith in the right submandibular region Wharton duct of a 65-year-old male patient. The Wharton canal entrance was checked with the help of an angio-catheter and then local anesthesia was performed. Saturation was performed to prevent the stone from moving backward. The angio-catheter was reinserted to visualize the canal path, an incision was made with electrocautery, and the stone was grasped with forceps and removed. Saturation was performed with 4.0 vicryl suture and it was checked that saliva flow was coming from the Wharton duct.

Conclusion: Removing salivary gland stones, which can be palpated by mass effect at the floor of the mouth, from the orifice with an intraoral approach is a good treatment option. The patient should be followed up, considering that salivary gland stones may recur.

Keywords: Sialolith, Submandibular gland, Salivary gland

PP-060

The Importance of Medical History: Potential Effects of Medications on Oral Health - A Case Report

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Objective: The utilization of medications for the management of acute and chronic ailments, coupled with the escalation in drug-related adverse reactions, persists to rise steadily. This case report narrates a case wherein tongue and lip lesions developed as a result of medication usage.

Case: A 65-year-old female patient was referred to our clinic for evaluation of lesions on her tongue and lips. Upon examination, it was observed that there were widespread, raised white lesions on the surface of the tongue, and extensive ulcerated areas on the lips (Figure 1). It was learned from the patient's history that she had previously been referred for biopsy due to suspicion of malignancy in other clinics. In the obtained medical history, it was revealed that the patient was using medication for epilepsy, and her doctor had changed her prescription two weeks ago, instructing her to dissolve the new medication in her mouth before ingestion. It was noted that the lesions on the tongue and lips had developed one week after starting the new medication. The correlation between the onset of the lesions and the initiation of medication caught attention, and the patient was referred back to her treating physician for consultation. Subsequent to the change in medication, regression of the lesions on the tongue and lips was observed.

Conclusion: Recognizing adverse drug events clinically is important for identifying early signs of potentially serious consequences. Physicians should keep in mind drug-related adverse reactions in elderly patients using prescription medications and should differentiate them from malignancies.

Keywords: adverse reactions, oral pathology

PP-061

Successful Autotransplantation of a Wisdom Tooth in Place of a Missing Permanent Molar and Long-Term Follow-up: Case Report

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Objective: There are various treatment modalities for tooth loss such as dental implants, orthodontic treatment or autotransplantation. Dental autotransplantation is a one-step alternative treatment option for the replacement of lost teeth in the presence of a suitable donor site, with low cost, low morbidity, excellent functional and aesthetic results compared to other treatment modalities in developing individuals.

Case: A 20-year-old female patient was admitted to our clinic. Panoramic X-rays and clinical examination revealed deep caries and mobility due to orthodontic treatment in the right upper first molar and extraction was decided. It was planned to transplant the wisdom tooth, which was impacted in the upper left region and whose root development was not yet completed, into the place of the first molar to be extracted. The tooth was extracted in the relevant area. After 2 months, when the patient was called for follow-up, it was seen that the healing process in the area was completed. Firstly, the rotator field preparation was completed and then the patient's impacted wisdom tooth was surgically extracted and placed in the relevant area to be transplanted.

Conclusion: In our patient, autotransplantation of a wisdom tooth was successfully performed to replace a missing permanent molar and no complications were encountered in the 10-year long-term follow-up of the still functioning tooth. In conclusion, in well-planned and appropriate cases, especially in young patients, autotransplantation is a good treatment option with low cost but high success rate.

Keywords: Autotransplantation, extraction, success

PP-062

Late Reconstruction of Secondary Alveolar Cleft with Anterior Iliac Bone Graft: Case Report

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Objective: Cleft lip and palate is one of the most common congenital anomalies of the head and neck region. Alveolar clefts are associated with cleft lip and palate anomalies. When secondary clefts are treated in the late period, the amount of hard and soft tissue graft required for the repair of the cleft increases.

Case: A 45 year old male patient was admitted to our clinic with complaints of eating and respiratory dysfunction. After clinical and radiographic examination, cleft lines were detected by CBCT imaging. Under general anaesthesia, a mucoperiosteal flap was lifted from the cleft lines to the alveolar crest. Oral and nasal mucosa were separated by dissection. A corticocancellous block bone graft was harvested from the anterior iliac crest by osteotomies and placed in the cleft area. After fixation with titanium plates and screws and filling the surrounding space with allograft material, it was covered with collagen membrane. The gingival mucoperiosteal flap was shifted to cover the graft and the entire cleft and sutured primarily. Mucosal integrity was completed on the 14th postoperative day.

Conclusion: The ideal treatment planning of alveolar cleft treatment is between 9-12 years of age. Since the reconstruction of the cleft was performed late in this case, the iliac crest, which is the most suitable donor site, was used. Dental implant treatment will be planned when appropriate bone formation is seen in the relevant area.

Keywords: cleft, iliac, seconder

PP-063

Reconstruction of Highly Resorbed Mandibular Posterior Region with Custom Titanium Mesh: case report

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Objective: In cases of severe resorption of alveolar bone, augmentation procedures may often be required in order to use a standard implant. In edentulous crests, good results can be obtained with the use of titanium mesh and grafts to increase both bone height and width. In this case report, the successful reconstruction of the severely resorbed mandibular posterior region due to long-term edentulism with titanium mesh and dental implant treatment with follow-up is presented.

Case: A 64-year-old female patient was admitted to our clinic for dental implant treatment. As a result of clinical and radiological examinations, it was determined that there was 2-3 mm of bone superior to the mandibular nerve in the mandibular posterior region and did not meet the required bone volume. A customized titanium mesh was prepared for the patient. The prepared mesh was fixed to the mandibular posterior region with mini screws by filling the allogen graft between the crest. The mesh was covered with membrane and PRF. After 6 months, the titanium mesh was removed and 2 implants of 8-10 mm in length and 3.7 mm in diameter were placed.

Conclusion: The specially designed titanium skeleton is used for bone augmentation in individuals who cannot receive dental implants. This skeleton, produced by computer-aided design and 3D printing, acts as a barrier by supporting bone formation with the addition of bone grafts. In this case report, an average bone height of 7 mm and sufficient horizontal bone was obtained in the posterior region of the mandible with the custom titanium mesh technique.

Keywords: alveol reconstruction, custom titanyum mesh

PP-064

Buccal Myomucosal Flap Closure of Oroantral Communications After Sequestrectomy for Denasumab-Associated Osteonecrosis: A Case Report

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Objective: There are various closure methods for the treatment of Oroantral communications. The systemic condition of the patient, the type and morphology of the defect, and the condition of the maxillary sinus are important in choosing the right technique. One of these techniques is the buccal mucosal flap, which provides the desired tissue volume and has good elasticity.

Case: A 72-year-old woman was admitted to our clinic due to the presence of exposing bone and pus flow in the posterior region of the right maxilla. In the anamnesis, it was learned that the patient used Denasumab (Prolia) for breast cancer. The patient was diagnosed as stage 3 MRONJ operated under local anesthesia. In the postoperative period, a buccal mucosal flap was planned for the treatment of the Oroantral communications. In the 2nd operation, a posterior-based flap was prepared on the right buccal mucosa, preserving the stenson canal. The well-stretched flap was passed under the mucosa lateral to the opening and sutured to the palatal mucosa. The rotator field was left for secondary healing.

Conclusion: The application of buccal mucosal flaps can be successful in cases of oroantral exposure caused by sequestrin in the posterior maxilla. The buccal mucosal flap is a versatile flap that is much larger and has better flexibility than the palatal flap. This flap provided the required length and width for the case, was well nourished, and provided closure of the Oroantral communications without any problems. No patency and complications were observed in the patient at the control sessions.

Keywords: bukkal myomucosal flap, mronj

PP-066 Treatment Of Large Radicular Cyst With Marsupialization

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Objective: Radicular cysts are the most common inflammatory odontogenic cyst in the maxilla and are formed by the proliferation of malasses epithelial remnants in response to chronic inflammatory stimuli in the apical region of devital teeth. The cyst tissue is usually asymptomatic but may cause pain if infected. If left untreated, it can cause major bone destruction. There are many surgical and non-surgical treatments for radicular cysts. At this stage, marsupialization is a good option due to its low morbidity rate and low risk of damage to anatomical structures.

Case: A healthy 16-year-old male patient presented to our department with pain in his right mandibular molar. Clinical examination of the patient did not reveal any findings, radiographic examination revealed a radiolucent lesion with regular borders associated with the root tips of teeth 45-46-47 and involving the mandibular canal. To treat the cystic structure originating from tooth 46, the tooth was extracted and a tube was sutured to protect the socket cavity. An impression was taken 2 weeks later and an obturator was made. The patient was followed up at 2-4-8-12-24 weeks and 1 year. The cyst cavity was observed to be completely ossified radiologically.

Conclusion: Since the cyst was in close proximity to vital structures, marsupialization was preferred as the treatment method. With this method, by disrupting the continuity of the cyst and reducing the internal pressure, it first started to shrink and then healed completely. Thus, the cyst was treated with marsupialization without the need for enucleation.

Keywords: Cysts, Marsupialization, Radicular

PP-068

Effect of Corticosteroid Use After Covid-19 on the Development of Medication- Related Osteonecrosis Of The Jaws: A Case Report

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Objective: Medication- Related Osteonecrosis Of The Jaws(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. Steroid-induced avascular necrosis appears to be a different and novel condition in patients who have recently recovered from COVID-19 following the use of high doses of steroids over a short period of time. There are a wide variety of options for treatment, from conservative treatments to surgical procedures of varying levels of invasiveness, supplemented by adjuvant treatments.

Case: As a result of the clinical examination of a male patient who did not have any systemic disease other than diabetes mellitus, who applied to our clinic with the complaint of pain, necrotic exposed bone without purulent exudate was detected in the anterior region of the maxilla after tooth extraction. Radiographically, radiolucent bone sequestra were observed in the anterior region of the maxilla. After the patient's complaints resolved after antibiotic treatment, the sequestered mobile necrotic bone was completely removed and the gingiva was primarily closed under general anesthesia. Post-operative follow-up showed that the patient had no complaints and the soft tissue was completely healed.

Conclusion: Although MRONJ is rare in patients using steroids after Covid-19, regular dental follow-up of patients and early intervention are of primary importance for the prognosis of alveolar bone in controlling this condition.

Keywords: Osteonecrosis, Covid-19, Mronj

PP-069

Surgical Treatment Of Compound Odontoma Close To The Mandibular Base In A Pediatric Patient: Case Report

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Objective: Odontomas are benign, non-aggressive, and the most common odontogenic tumor of the jaws. Most odontomas are asymptomatic and lead to disturbances in the eruption of the teeth. It can be classified as compound or complex odontomas depending on their radiological and histological features. The purpose of this case report is to present a case of a large compound odontoma with extensive boundaries and its surgical treatment.

Case: In the radiograph taken of a 7-year-old male patient who applied to our clinic due to an impacted tooth, many radiopaque structures and unerupted teeth were seen in the left mandibular corpus.. It was learned that the patient did not have any systemic disease. After biopsy was taken under local anesthesia and the diagnosis of compound odontoma. Due to the risk of fracture in the mandible, the defect was closed with the help of a resorbable plate and iliac graft after the odontoma was removed under general anesthesia. The wound was carefully irrigated with physiological solution and flap was repositioned and sutured with 3.0 absorbable suture.

Conclusion: Although they are benign tumors, odontomas, which can cause facial asymmetry and decrease in bone strength as they grow, are often seen in the anterior maxilla, whereas in our case they were seen in the posterior region of the mandible. No symptoms were found in the patient's routine check-ups. The patient's follow-up continues.

Keywords: Resorbable Plate, Odontoma

PP-070 Maxillary Double Lip: Case Report

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Objective: The aim of this study is to report a case of Ascher's syndrome, which is a rare disease first described in 1920 by Ascher. The disease is characterized by a double upper lip, blepharochalasis, and nontoxic thyroid enlargement, though the thyroid enlargement may be evident in only 10% to 50% of patients. These deformities, though not posing functional problems, may cause severe psychological distress to the affected person because of the disfiguring effect on smiling.

Case: A 34-year-old male came to the department complaining of a disfigured upper lip. He reported having this feature since he was 23 years old, and that his son also has the same problem. The patient had no history of trauma. A double upper lip was visible during physical examination. only when the patient smiled. The patient also presented with bilateral blepharochalasis on his upper eyelids, but there was no clinical indication of thyroid enlargement. A clinical diagnosis of Ascher's Syndrome was made and surgical correction including removal of the "accessory" lip was performed via a transverse elliptical incision under local anesthesia. The incision was subsequently sutured.

Conclusion: Prompt recognition of Ascher's syndrome can prevent unnecessary tests and diagnostic delays, and allow for quicker scheduling of appropriate surgical treatment.

Keywords: Double upper lip, Ascher's syndrome, Deformities

AÇBID - NEXT GEN

Cemil Eren

Dr. EREN earned his DDS degree from the Ankara University, Faculty of Dentistry. He completed his specialty training in Oral and Maxillofacial Surgery at Erciyes University in 2023 with a thesis titled "Experimental Investigation of The Preventive and Therapeutic Efficacy of Emdogain in Medication-Related Osteonecrosis of The Jaws". Dr. EREN is a member of ACBID and still working as research assistant at Erciyes University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery.

Minimal Invasive Approaches for Closure of Oroantral Communications

Oroantral communication (OAC) is a common complication that occurs between the maxillary sinus and the oral cavity after maxillary molar extraction whose root tips are associated with the maxillary sinus. Untreated OAC can act as a pathological pathway for bacteria. This often leads to infection of the maxillary sinus and non-healing of the extraction site. Immediate closure of OACs, preferably within 24 to 48 hours, is recommended to minimize the risk of maxillary sinusitis and fistula development. The size of the opening is important for OAC management decision. Although openings smaller than 2 mm tend to heal spontaneously, openings between 2 and 6 mm can be treated with simple surgical methods such as; gauze suturing, bleeding stopper placement or grafting procedures. Surgical treatment methods like local flaps and buccal fat pad are preferred for OACs larger than 6 mm. Surgical methods have disadvantages such as difficulty in application, need for technical team and equipment, morbidities such as pain and edema. Therefore, the search for new methods that are easy to apply and less cost still continues. In the current literature, minimally invasive alternative methods such as platelet-rich fibrin, collagen sponges, occlusal splints are described for oroantral communication closure. In this presentation, the effectiveness of current alternative treatment methods of OAC will be discussed.

Cihan Varol

I graduated from the Faculty of Dentistry at Selçuk University in 2016. In the same year, I successfully passed the DUS exam and had the opportunity to receive Oral and Maxillofacial Surgery specialization training at Süleyman Demirel University upon the recommendation of Professor Doğan DOLANMAZ. In 2021, I received the title of Oral and Maxillofacial Surgeon by presenting my thesis entitled "Evaluation of the effect of the neutrophil-lymphocyte ratio on postoperative edema in patients who underwent orthognathic surgery using stereophotogrammetry method", supervised by Professor Timuçin BAYKUL. At the beginning of 2022, I started working at Süleyman Demirel University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. In the same institution, I served as the Deputy Chief Physician between 2022 and 2024, and as the head of the Blood Transfusion Committee in 2023. I am married and the father of one child.

Blood Loss in Orthognathic Surgery: Transfusion Process from The Perspective of an Oral and Maxillofacial Surgeon

Blood loss is a common complication during and after orthognathic surgery. Bleeding, a natural consequence of surgical intervention, can usually be easily controlled. However, it can become severe due to various causes, such as vascular injuries, factor deficiencies, and underlying systemic diseases. In such cases, bleeding may be quite prolonged, and depending on the amount of blood loss, urgent blood transfusion may be required.

A multidisciplinary approach is required for blood transfusion process. Due to the potential for serious complications and the strict legal process, blood transfusions must be carried out with care. In this presentation, it is aimed to discuss the factors affecting bleeding in the perioperative period in orthognathic surgery and the appropriate conditions for blood transfusion based on current evidence-based data. In addition, clear and brief information will be given about the legal responsibilities and requirements regarding the establishment of blood transfusion centers in public tertiary dental hospitals in Turkey.

Keywords: Orthognathic surgery; blood loss; blood transfusion

Emine Tuna Akdoğan

2007-2012 : Graduated from Çukurova University Faculty of Dentistry

2013-2017 : Graduated from Marmara University Faculty of Dentistry, Department of Oral, Dental and Maxillofacial Surgery

Since 2020, she has been working as a Assistant Professor at Istanbul Kent University Faculty of Dentistry.

Current Approaches To Dental Implant Complications

Abstract

Periodontal diseases, tumor resections, traumas and a number of systemic and local factors can cause tooth loss in the jaw bones. The increase in the amount of tooth loss brings with it functional deficiencies such as chewing and phonation, as well as aesthetic disorders and related psychological effects. Properly planned prosthetic rehabilitation must be performed to restore the functional disorders, aesthetics and phonetics that occur in tooth loss and to change the current situation. Implant applications, which eliminate the disadvantages of traditional prostheses, have been applied intensively recently. It has many advantages such as retention and patient comfort. Although implant treatment is an accepted treatment, its success and survival depends on many factors such as osseointegration. In these days when its use is quite widespread, it also brings many complications. While most of the complications that can occur during or after implant placement can be resolved without serious problems, in some cases they can lead to dental implant failure and even life-threatening situations. The aim of this presentation is to provide current literature information about the prevention and solution of complications that may occur during dental implant surgery such as bleeding, implant leakage into adjacent anatomical spaces, dehiscence and fenestrations, soft tissue and nerve injuries, low primary stability, and damage to the adjacent tooth.

Keywords: Dental implant, complication, bleeding, nerve injury

Esra Beyler

Speaking of profession, Dr Esra Beyler was born and raised under the roof of Baskent University, Ankara. Dr Beyler graduated from Faculty of Dentistry in 2011, has completed Oral Surgery specialty training in 2016 and Phd in Oral and Maxillofacial Surgery in 2019. Thanks to ACBID Dr Timuçin Baykul Support Program, she has completed two months of clinical fellowship training program in University Medical Center Groningen in 2022. Currently Dr Beyler is working as Assistant Prof. in Baskent University Department of Oral and Maxillofacial Surgery, Ankara.

Relationship Between Maxillomandibular Deformity And Posture; Highlight On The Impact Of Orthognathic Surgery

Postural control can be described as the act of maintaining, achieving and re-establishing a specific state of balance during any posture or activity; in guidance of vestibular, visual, and proprioceptive systems. Untreated malocclusion is associated with poor neck posture such as increased lordosis of the cervical spine and the extended or anteriorly positioned head, especially in patients with Angle Class II malocclusion. On the contrary, patients with Angle Class III malocclusion tend to present a flexed and posteriorly positioned head with a decreased cervical lordosis. Orthognathic surgery aims to ameliorate dental occlusion, and facial esthetics, through relocating of maxillomandibular structures, subsequently balancing mandibular proprioception. In terms of postural sway the potential association between posture and malocclusion has also been a topic of discussion. Recent studies draw attention to this potential role of jaw positions in maintaining postural control. Data showed the proprioceptive sensory value related to the mandibular system was improved by creating a new reference frame that may enable the head to orient in space by enhancing the postural stabilization. This presentation aims to discuss current literature findings on the interaction between body posture and corrective surgery of Class 3 skeletal deformity.



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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 2024, she was entitled as an Associate 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 stem cells.

Repair of Bone Defects by Mesenchymal Stem Cells

The current approach for bone regeneration is evolving by studies on cells and bioactive molecules to create an osteogenic substitute. Several studies have been carried out to formation a patient-specific tissue that reflects the structural, mechanical and biological properties of bone, is as close to natural bone as possible. The goal of these studies involved a stimulation of selected cells or tissue to provide repair and formation by increasing molecular activity. By self-renewal and differentiation capacity, stem cells offer a new area in regenerative therapy. As a useful source of stem cells, mesenchymal stem cells are easy to collect and culture, and also have immunoregulatory properties. These cells isolated from different stromal tissues, are activate or inhibit various cellular and molecular pathways, contributing to the repair of defective sites. This presentation includes the use of autologous mesenchymal stem cells for bone regeneration in an animal study.



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Kıvanç Berke Ak

2016- Yeditepe Üniversitesi Diş Hekimliği Fakültesi
2023- İstanbul Medipol Üniversitesi Ağız Diş ve Çene Cerrahisi

Atypical Outcomes/Complications in Oral and Maxillofacial Surgery

Abstract

Unexpected or atypical outcomes after oral and maxillofacial surgery can lead to diagnostic difficulties and management challenges for surgeons. This presentation will analyze some cases with atypical outcomes, complications, and complexities involved in their identification and treatment.

Mert Akbaş

Dr. Mert Akbaş Clinic (2021–still)

Okmeydanı Dentistry Hospital Oral and Maxillofacial Surgery Department (2017- 2022)

Nişantaşı University- Academician- Lecturer 2013-2017(full- time), 2017-still (part- time)

Bezmiâlem University OMFS Department (2013-2015)-Lecturer 2015-2016 (part-time)

Ministry of Justice–Forensic Dentistry Department Dental Expert (2017-still)

Retrospective Evaluation of the Success of Zygomatic Implants Applied Different Techniques

Resorption in the alveolar bone, which occurs both due to advanced age and tooth loss, makes dental implant treatment difficult, especially in the maxilla, which is called the upper jaw bone. Zygomatic implants can provide dental rehabilitation of the maxilla by shortening the current treatment time without requiring advanced surgical treatment methods and reduce the morbidity that may occur in the patient. In recent years, zygomatic implant applications have gained popularity.

In our study, zygomatic implants placed in 3 techniques (extrasinus, intrasinus, sinus slot) were evaluated retrospectively. Success of zygomatic implants was assessed according to prosthetic success, brand of the placed implant, age and gender of the patient and preferred surgical technique. 189 zygomatic implants in 57 patients (78 of 189 implants performed with ekstrasinus approach, 44 of 189 implants performed with intrasinus approach, 67 of 189 implants performed with sinüs-slot approach) were placed.

In our study, it was concluded that the success of zygomatic implants depends on the method of application of zygomatic implants (extrasinus, intrasinus and sinus slot). However, no significant correlation was found between the success of zygomatic implants and the brand of zygomatic implant, age, gender and type of prosthesis.

Keywords: Zygomatic implant, implant success, sinüs-slot technich, intrasinus technich, ekstrasinus technich

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Merve Çakır

Merve Çakır graduated from Gazi University Faculty of Dentistry, Ankara, Turkey, in 2008. She stayed at the same university for her postgraduate degree in Oral and Maxillofacial Surgery and earned her PhD and specialty degrees in 2014. Between 2014-2017 she worked as Assistant Professor in the Department of Oral and Maxillofacial Surgery at Istanbul Yeni Yuzyıl University. Since 2017, she has been working as Assistant Professor at Istanbul Okan University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. Her research interests include dental implantology, TMJ, orthognathic surgery, maxillofacial trauma, and oral pathology.

Innovations In Implant Dentistry

Dental implants are a reliable option to replace missing teeth. In the last few years, technological innovations have been changing the field of implantology. Due to the recent development of biomaterials and dental implant surfaces, a variety of treatment options can be offered to patients. In addition, advances in prosthodontic and surgical techniques, such as immediate loading, have expanded the treatment possibilities and broadened the range of patients that may benefit from dental implant treatments. Advances in materials science, including in graft materials, and dental implant surfaces, such as digital implant planning, facilitate daily practice and improve treatment outcomes. However, all of these new possibilities make dental implant treatments challenging. In this presentation, innovations and challenges in implant dentistry will be discussed with cases and current literature data.

Murat Günbatan

Murat Günbatan studied at Yeditepe University, Faculty of Dentistry, Istanbul, Türkiye between 2009-2014 and received his bachelor's degree. After his graduation; He started his doctorate program in the Department of Oral and Maxillofacial Surgery, Istanbul University, Faculty of Dentistry. In 2020, he completed his thesis defense in the doctorate program and received the PhD title. In the same year, he started working as an Assistant Professor at Istanbul Okan University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. He been working as lecturer and conducting research as an assistant professor at this faculty. His areas of interest are dental implantology, maxillofacial trauma, oral pathology, rehabilitation of bone deformities.

New Era Of Dental Implant Surgery: Precision And Accuracy

Dental implants are a reliable option to replace missing teeth. In the last few years, technological innovations have been changing the field of implantology. Due to the recent development of immediate loading and digital planning are guiding treatment options. The desire of patients not to be edentulous after surgery leads physicians to place implants with more precise and accurate results in their treatments and plans. For this reason, there are developments in dentistry that keeps pace with digitalization in all areas of the world. Chief among these developments are personalized subperiosteal implants, navigation support in dental implantation, and implant placement using guides. These techniques aim to place implants in the most ideal bone and position and provide prosthetic treatment in the same session. In this presentation, the contributions of digitalization in the placement of dental implants will be discussed in the light of cases and current literature data.

Mustafa Zengin

Mustafa Zengin is currently working as an oral and maxillofacial surgeon at Acıbadem Hospital in Istanbul, Turkey. He graduated from Istanbul Medipol University, School of Dentistry in 2017. He started his postgraduate education in the orthodontics specialty program at Selcuk University between 2018 and 2019. Subsequently, he furthered his education by completing the Oral and Maxillofacial Surgery PhD program at Istanbul Medipol University between 2019 and 2024. Mustafa Zengin is also an active member of the International Association of Oral and Maxillofacial Surgeons (IAOMS) and ACBID.

Proximal Segment Rotation Following Orthognathic Surgery

Bilateral sagittal split ramus osteotomy divides the mandible into distal and proximal segments and allows movement of these segments within certain limits. The movements of the condyle or proximal segment can directly affect the stability of the surgical outcome, temporomandibular joint function, and mastication. Therefore, the ideal positioning of these structures is one of the most critical steps in orthognathic surgery. If proper care is not taken, significant complications may arise during the postoperative period, including, but not limited to, relapse, TMJ dysfunction, or malocclusion. This speech aims to provide an evidence-based perspective and establish new correlations within this controversial topic of orthognathic surgery.

Onur Koç

2011-2017 - Research Assistant

Oral and Maxillofacial Surgery Hacettepe University

2017-2023 - Specialist Dr.

Oral and Maxillofacial Surgery Hacettepe University

2023-Present- Asst. Prof. Dr.

Oral and Maxillofacial Surgery Hacettepe University

Enhanced Predictability In Orthognathic Surgery with 3-Dimensional Digital Systems

Orthognathic surgery has a significant impact on patients' lives and psychology as it involves notable changes in their facial structures. Predicting surgery outcomes more accurately can increase patient satisfaction and prevent complications. These circumstances can contribute to the success of the practitioners at high levels. It has been proven that the maxillary sinuses undergo distinct alterations as a result of the advancement, roll, and yaw rotation movements of the maxilla through LeFort I osteotomy. It is crucial to have preoperative awareness through three-dimensional (3D) systems to prevent unintended severe consequences in the long term. Each mandibular movement through bilateral sagittal split ramus osteotomy has varying effects on the position of the mandibular condyle. Practitioners can prevent long-term temporomandibular joint disorders by simulating distal and proximal segment movements in the planning software. Producing surgical guides and patient-specific implants not only shortens operation time but also ensures high accuracy in reflecting the preoperative plan to the surgical area. The multifactorial nature of facial asymmetry in the coronal plane makes it a challenging issue for practitioners. In asymmetric patients, the inadequacy of 2-dimensional planning methods also increases the complexity of the solution. 3D planning methods can overcome this challenge and introduce new skeletal assessment points to achieve optimal postoperative symmetry. Although 3D systems offer new perspectives in orthognathic surgery, improvements are still needed.

Selin Çelebi

She was born in Izmir in 1992. She completed her primary and secondary education in Ankara. After graduating from Dr Binnaz Ege Dr Ridvan Ege Anatolian High School in 2010, she entered Ankara University Faculty of Dentistry. She graduated from the faculty in 2015 with 3rd degree. In 2016, she was accepted to Erciyes University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. She received her specialist degree in June 2022. She is a member of EACMFS, IAOMS and ACBID and still continues her career in the department of oral and maxillofacial surgery at Erciyes University Faculty of Dentistry.

How Can We Control Undesirable Nasolabial Soft Tissue Changes After Le Fort I Osteotomy?

Introduction: After Le Fort I osteotomy can generate undesirable changes such as upturning of the nasal tip, widening of the alar base, flattening and thinning of the upper lip. V-Y closure and alar cinch suture are aimed at preventing these changes. The Subspinal Le Fort I osteotomy (SLFIO) has been performed to preserve the perinasal musculature insertions and the pre-existing position of the ANS and nasal septum. This study sought to evaluate the effectiveness of SLFIO in preventing nasal deformation and nasal airway by analyzing changes in the nasal profile on three-dimensional computed tomography (3D-CT) and 3DMd images.

Materials and Methods: This study was designed as a prospective, randomized, double-blind study in patients with class III dentofacial deformity. Patients were divided into two groups as SLFIO (n = 22) and CLFIO without modifications (Conventional Le Fort I Osteotomy) (n = 25). Data obtained from stereophotogrammetric photos and CBCT before and 6th months after the surgery, that were evaluated to determine nasolabial changes and nasal airway.

Results: Changes in interalar and alar base width, nostril width, columella-labial and interalar angle in the SLFIO were statistically significant different than the CLFIO ($p < 0,05$). Also, there was statistically significantly less edema in the SLFIO ($p < 0.001$). When the preoperative and postoperative data of the septum deviation angle and nasal airway volume were examined, there is no statistically significant difference was found in the comparisons between and within the groups.

Discussion: The treatment goals of ortognathic surgery have been focused on aesthetic outcomes, recently. The use of a V-Y closure and some type of alar cinching technique are common strategies although the permanence is controversial. SLFIO can be an effective method to prevent undesirable skeletal and soft tissue changes.

Serap Gülsever

Serap Gülsever has been working as an Assistant Professor at Istanbul Medipol University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery since 2016. She graduated from Ege University, Faculty of Dentistry. She worked as a dentist for five years. She completed her specialization and received her PhD degree in Oral and Maxillofacial Surgery at Başkent University in 2014. Her areas of clinical and research interest are dental implantology, TMJ disorders, oral pathology, and orthognathic surgery. She authored several publications

Orthognathic Surgery in Older Patients

The motivation for undergoing orthognathic surgical treatment to correct functional and aesthetic problems varies according to age and gender. The majority of patients are in the second or third decade of life; however, there has been a significant increase in the incidence of older patients seeking orthognathic surgery in recent years. Men mostly apply with functional concerns, in line with the increasing frequency of obstructive sleep apnea syndrome with age, while women mostly apply with aesthetic concerns. Patients over the age of forty may have delayed orthognathic surgery because of financial inability, lack of time due to an active working life, previous inadequate diagnosis and treatment, and aesthetic expectations becoming clearer with age after facial structural changes. In recent years, developments in orthognathic surgery techniques, the increasing number of centers where these procedures are performed, the growing influence of social media on aesthetic perceptions, and the popularity of transparent orthodontic aligners have led to an increase in awareness and interest in orthognathic surgery.

Although age is not the primary determinant of surgical outcomes, the perioperative management of older patients may be more challenging than that of traditional orthognathic patients due to bone loss, reduced bone density, periodontal disease, edentulism, medication use, and medical comorbidities. Perioperative complications that are more common in these patients include infection, delayed wound healing, hardware removal, postoperative skeletal instability, neurosensory disturbances, prolonged hospital stay, rehospitalization, reoperation, and airway complications.

Identifying age-related perioperative differences may enable surgeons to mitigate risks specific to older orthognathic surgery patients and improve patient experience and satisfaction by educating this cohort regarding potential complications and adverse outcomes.

Taha Pergel

Taha Pergel was graduated from Marmara University Faculty of Dentistry, İstanbul, Turkey, in 2014. By entering the national examination for specialty in the field of Dentistry held in 2016, he gained the opportunity to be a resident in the Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, at Erciyes University, Kayseri, Turkey; and received her specialty degree in 2020. He worked as a clinical academican for two years in the Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, at Bezmialem Vakif University, İstanbul, Turkey; and then, he was appointed Assistant Professor at the same University in 2023. He has been working at this institution as an Assistant Professor since August 2023. His research interests include orthognathic surgery, oral and maxillofacial pathology, and dental implantology. In this presentation, the situations that need to be taken into consideration in orthognathic surgery to prevent bleeding, nerve damage and condyle position related complications are briefly summarized.

Safety in Orthognathic Surgery

Orthognathic surgery is performed to correct dentofacial and craniofacial deformities and improve facial aesthetics, occlusal relations, and the functionality of the stomatognathic apparatus. Corrected jaws lead to improved function and aesthetics, and the enhanced appearance also benefits the patient both psychologically and socially. However, complications in orthognathic surgery may occur at any time during the course of treatment: in the preoperative assessment and planning, during perioperative orthodontic care, or intraoperatively. Such complications include nerve damage, unfavorable osteotomy, temporomandibular joint problems, hemorrhage, malocclusion, septum deviation, infection, bone necrosis, ophthalmologic impairment, and neuropsychiatric problems. Moreover, some complications can be fatal. In this presentation, the situations that need to be taken into consideration in orthognathic surgery to prevent bleeding, nerve damage and condyle position related complications are briefly summarized.