AÇBİD 15. ULUSLARARASI KONGRESİ

AÇBİD 2022

AÇBİD 15th INTERNATIONAL CONGRESS

EACMFS Bilimsel Sponsorluğunda
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May 11th-15th 2022 Susesi Hotel & Convention Center ANTALYA

ABSTRACTS

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ORAL PRESENTATIONS

OP-001
Transmandibular approach for Pharyngeal Tumor

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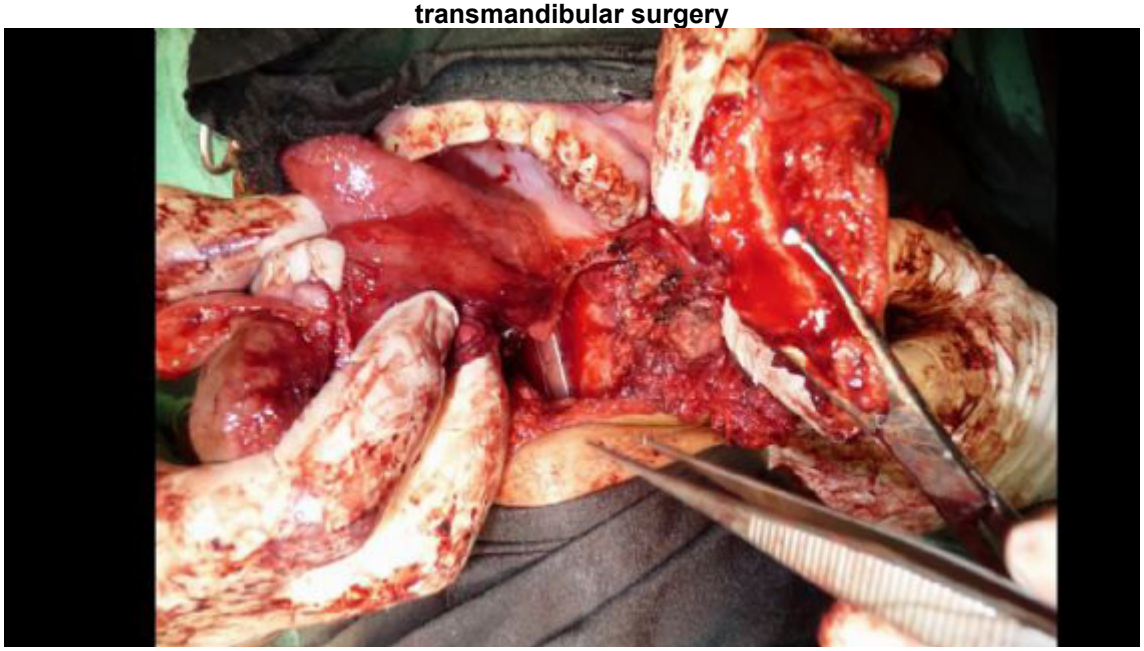
[2]*Mosul University Medicine Collage Surgical Department Iraq Mosul*

Several approaches has been recommended for pharyngeal tumor, but when cannot be satisfactorily approached through the open mouth, an access procedure becomes necessary. A 35 years old male referred to maxillofacial department complaining from mass in the hypopharynx with difficult swallowing. patients underwent pre-treatment clinical evaluation in which included physical examination, upper aerodigestive tract endoscopy, biopsy, ultrasound and needle aspiration cytology, routine blood tests and staging contrast-enhanced computed tomography scans and magnetic resonance imaging (MRI) of head, neck and chest. The results of investigations showed (22,8mm * 10.2mm) lesion involved the anterior wall of pharynx and the histopathological study of specimen showed spindle cell carcinoma which is a relatively rare malignancy affecting the upper aerodigestive tract. The most common site of origin in head and neck region is larynx and hypopharynx. The challenge and specialty of this case was how we can reach to tumor for complete excision? The decision was choosing a trans-mandibular approach. The operation was done by the maxillofacial surgeon that open the road toward the tumor by lip splitting and doing mandibulotomy after determine the plate position which will used for mandibular fixation, then we went through the oral floor with ligation of main vessels and avoiding nerves and vital structures, the lesion exploration and excision was done by plastic surgeon, operation continued by maxillofacial surgeon for closure the large wound and bone fixation. The transmandibular approached give satisfactorily access to pharyngeal tumor but at the same time it associated with difficulty and susceptibility of complications.

Keywords: Pharyngeal tumor, Transmandibular surgery

pharyngeal tumor

transmandibular surgery



One month post-operative

OP-002
A conservative approach to maxillar radicular cyst in a 12 year old patient: Case Report

Ali Can Uçar, Betül Taş Özyurtseven
Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Gaziantep University, Gaziantep, Turkey

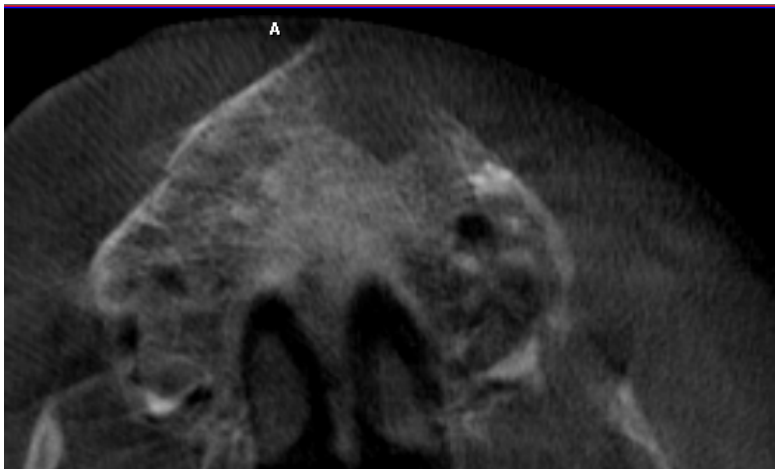
Objective: Radicular cysts originate from epithelial remnants of periodontal ligament as result of pulp necrosis. cysts commonly involve the apex of the affected tooth. Caries is the most frequent etiological factor. They may also be a result of traumatic injuries. İn this case report we present conservative approach to mobile left maxilar incisors in cystic area due to trauma background

Case: 12-year-old female patient reported to the department of Oral and Maxillofacial Surgery Gaziantep university, with chief complaint tooth mobility. The intra-oral examination revealed class 2 mobility of the left maxillar incisors (miller classification). History of dental trauma recorded. There was no swelling nor pain. Teeth 21 and 22 did not respond to thermal and electrical pulp tests. Orthopantomograph and CT revealed a single well-defined periapical radiolucency measuring about 2×2cm inculuding apex of 21 22 and 23. 2 week semi rigid splint and following endodontic treatments was applied. And then sample from cystic capsule was taken for biopsy. At same time decompression tube inserted. After 6 months, Cystectomy and following apicectomy to teeth number 21 and 22 performed. MTA used for a retrograde root-end seal. 6 month follow up examinations showed no sensitivity, mobility and the soft tissues were healthy. radiographic resolution of radiolucency were complete.

Conclusion: The current concept in management of periapical cysts is conservative nonsurgical approach. This case was managed successfully by performing semi rigid wire splints, endodontic therapy, decompression thereapy followed by cystectomy and apicectomy. Multidisciplinary approach is always beneficial to provide effective treatment plan.

Keywords: Apical resection, Dentoalveolar trauma, Radicular cyst

ct 1



left maksillar anterior region axial plane ct

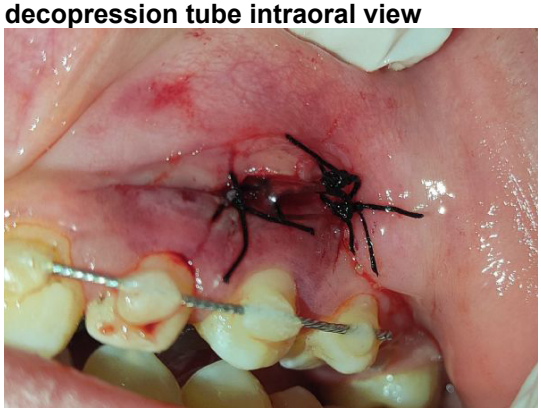
ct 3

left maksillar anterior region coronal plane ct

ct2

left maksillar anterior region sagital plane ct

decopression tube intraoral view



decopression tube intraoral view

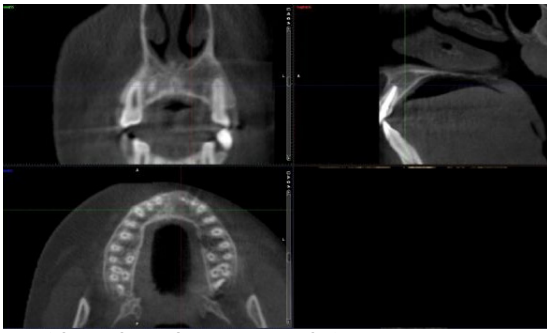
follow up

Postoperative picture after 8-month followup

intra oral

Preoperative picture showing maxillar incisors with trauma signs

resolution



ct imaging shows complate resolutiın of cystic lesion

semi rigid wire composite splint intraoral view

semi rigid wire composite splint intraoral view

OP-003
Oral Cancer Development From Long-Term Prosthesis use

Muhammed Yazıcı, Ebru Deniz Karslı, Betül Taş Özyurtseven, Metin Güngörmüş
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Objective: Oral cancers are encountered in Turkey as well as all over the world. Oral cancers constitute %4-5 of all cancers. Oral squamous cell carcinoma constitutes %90 of oral cancers. The most important etiological factors are; tobacco and alcohol use. Radiotherapy to the head and neck region, vitamin deficiencies (B12, iron VitA), oncogenic viruses, immunodeficiency diseases other are factors. In our country, it is seen in cancers due to chronic irritation caused by poor oral hygiene, wrong and non-physician prosthetic applications.

Case: In this case report, an 80-year-old edentulous male patient has a lesion in the right side of the lower jaw in the canine-premolar region, which developed due to chronic irritation caused by the use of the same total prosthesis for 30 years, has been present for 1 year and has not healed, and which has been learned to cause bleeding while wearing a prosthesis for the last 1 month, was evaluated. The patient does not smoke or use alcohol, and uses antihypertensive and anticoagulant drugs due to heart disease. The long-term existence of the lesion and recent bleeding suggested the possibility of malignancy and incisional biopsy was performed.

Conclusion: The prognosis is best when the primary tumor is small and there is no evidence of regional lymph node involvement or distant metastasis. In fact, according to the TNM staging system, the 5-year survival rate of people with early -stage oral SCC can reach %80 - %90, while the five-year survival rate for advanced-stage oral SCC is about %40.

Keywords: Scc, Prosthesis, Malignancy

Oral SCC

Oral SCC image due to prosthesis use

OP-004
Pedicule Fat Tissue Flap Use On Mandible In The Treatment Of BRONJ

Mahmut Aycan, Ayşen Çiçek, Metin Güngörmüş
Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Gaziantep University, Gaziantep, Turkey

Objective: Bisphosphonates are generally used in the treatment of postmenopausal, corticosteroid-enhanced osteoporosis, Paget's disease, hypercalcemia and metastatic bone diseases associated with malignancy and osteolysis. Bisphosphonate-induced osteonecrosis of the jaw (BRONJ) can lead to serious oral complications such as osteomyelitis and exposure of necrotic bone. In this case report, it was aimed to observe the application and effectiveness of pedicled adipose tissue flap in the maxilla in stage III bisphosphonate-related osteonecrosis of the mandible.

Case: In an 84-year-old female patient who has been using oral bisphosphonate (BONVIVA ROCHE® 150 mg film-coated tablet) for 15 years due to osteoporosis, BRONJ has developed after the extraction of 37 (February 2020). In the oral examination of the patient who applied to our clinic in July 2021, an exposed area with sequestrum formation was observed. Pus formation and gingival bleeding were observed in the area accompanied by submandibular lymphadenitis. Cone-beam computed tomography revealed a well-defined hypodense image bordered by a thin, hyperdense halo with no bony enlargement. Before the surgical approach, 150 mg of Clindamycin (3x1) was prescribed. The clinical diagnosis was osteonecrosis associated with an antiresorptive drug. Surgical treatment was followed by surgical debridement of necrotic bone with hyperbaric oxygen support, followed by pedicled buccal bichat tissue and platelet rich fibrin (PRF) before primary closure.

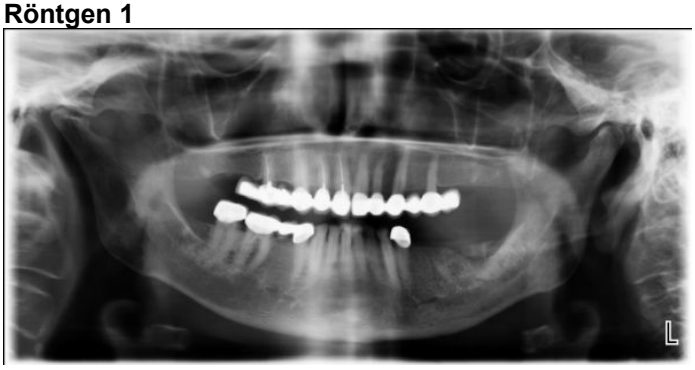
Conclusion: This case showed that the use of pedicled buccal adipose tissue in the mandibular molar region in the treatment of BRONJ is effective, safe and accessible.

Keywords: Bisphosphonate-Related Osteonecrosis of the Jaw, Pedicled buccal adipose tissue, Mandible

Pedicled buccal adipose tissue

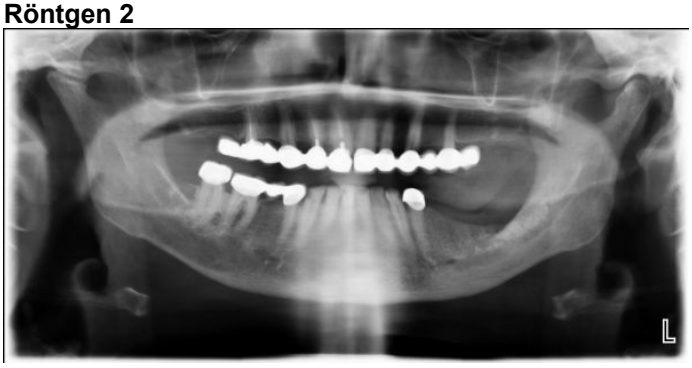
Use of pedicled buccal adipose tissue in the mandibular molar region in the treatment of BRONJ

Röntgen 1



PREOPERATIVE PANORAMIC RADIOGRAPHY

Röntgen 2



POSTOPERATIVE PANORAMIC RADIOGRAPHY

OP-005
Dental Implant Migration Into The Maxillary Sinus: Report of Two Cases and Literature Review

Aras Erdil
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Objective: Dental implant placement on the atrophied posterior maxilla may be challenging due to limited bone height and width. The bone augmentation procedures are commonly performed to overcome residual crestal discrepancies. Dental implant migration into the maxillary sinus is a rare but increasingly reported complication. The present report aims to demonstrate the removal of two implants that have migrated into the maxillary sinus with different approaches depending on the location of the dental implant. Also, the reported cases in the literature were reviewed in major databases (e.g., Pubmed, Web of Science, Scopus, Cochrane Library), and the performed approaches, risk factors, and related complications were classified.

Case: In both cases, it was observed that dental implants applied without grafting migrated into the maxillary sinus with unsuccessful osseointegration. Caldwell-Luc operations were performed with the lateral window method and the anterior window method. The oroantral tracts were curetted, and mucoperiosteal flaps were primarily sutured. Both implants were retrieved, and the patients' symptoms resolved.

Conclusion: The selection of an appropriate surgical approach depends on the location of migrated dental implants and the surrounding anatomical structures. While the least compelling intervention is the crestal approach, the operating difficulty increases as the displaced implant migrates anteriorly. Also, the factors related to sinus anatomy (e.g., sinus width, sinus angle, Schneiderian membrane thickness) have been observed to impact the primary stabilization and resorption of bone grafts.

Keywords: Dental implant complications, Dental implant displacement, Maxillary sinus

OP-006
Reactive Lesions of the Oral Cavity

Sefa Çolak, Nihat Akbulut, Yunus Balel
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Objective: Reactive hyperplasic lesions are defined as benign lesions that develop in response to a chronic trauma that stimulates an exaggerated tissue repair response. This overreaction causes a clinical picture in the form of soft tissue enlargement. The aim of this study was to evaluate the frequency of various types of oral reactive lesions in a university oral and maxillofacial surgery clinic.

Materials-Methods: Patients who applied to the Oral and Maxillofacial Surgery Clinic between January 2013 and January 2019, underwent excisional biopsy and whose biopsy results were compatible with reactive hyperplasic lesions were included in this retrospective study.

Results: Of the 541 patients who underwent excisional biopsy between certain dates, 116 (21,4%) were included in the study. Of the 116 patients included in the study, 20.68% peripheral giant cell granuloma, 3,4% epulis fissuratum, 14.65% inflammatory granulation tissue, 34.48% irritation fibroma, 11,2% pyogenic granuloma, 4,3% ossifying fibroma and 11,2% squamous papilloma were diagnosed. A high diagnostic agreement was observed at a rate of 79,31% between clinical pre-diagnosis and pathological diagnosis.

Conclusion: Reactive lesions, which develop due to trauma or local irritant factors and are commonly observed in the oral cavity, may rarely mimic malignant lesions, although they are benign. Understanding its clinical features is important in establishing a clearer clinical diagnosis, as well as in determining the development of oral hyperplasia pathologies and etiological factors.

Keywords: Diagnosis, Hyperplasia, Reactive Hyperplastic Lesions

OP-007
Maxillary Ameloblastic Fibroma: A Case Report

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[2]*Oral and Maxillofacial Surgery Department, Atatürk University, Erzurum, Turkey*

Ameloblastic fibromas are rare mixed odontogenic benign tumors with mesenchymal and epithelial components. It is most commonly seen in young adults. It is a relatively rare tumor, accounting for approximately only 1.5-4.5 % of odontogenic tumors. Ameloblastic fibromas are located in the posterior mandible in 70 % of cases. The tumors may be either unilocular or multilocular on radiography. Small tumors may be managed with enucleation and curettage. However, larger tumors are often very destructive that a resection is the only option. This case report describes an Ameloblastic Fibroma that occured in the maxillary posterior region in a 12 year old male patient with a swelling. The case was managed with enucleation and curettage of surrounding bone.

Keywords: Ameloblastic Fibroma, Maxillary Tumor, Odontogenic Tumor

OP-008
Treatment Approach to Combined Mandibular Fracture: A Case Report

Utku Nezih Yılmaz, Fatma Eriş Derkuş, Can Sezgin
Dicle Üniversitesi Diş Hekimliği Fakültesi, Ağız Diş ve Çene Cerrahisi, Diyarbakır

Objective: Mandible fractures are one of the most common maxillofacial injuries. Combined fractures in the mandible appear clinically according to the amount of force, the region and direction of force. As a result of the blows taken from the symphysis in the mandible, combined fractures develop, in the condyle neck, with the linear transmission of the force in the cortical structure. The aim is to discuss the diagnosis and treatment methods of combined mandibular fracture and to show the treatment approach we chose in our case who developed bilateral parasymphyseal and left condyle fractures due to falling from a height.

Case: A 30-year-old male patient was admitted to our clinic with a history of falling from a height. In the clinical examination, trismus, hyperemia and edema were observed. Radiographic examination revealed fractures in the right and left parasymphyseal regions of the mandible and in the left condyle neck. For treatment, open reduction was planned by providing intermaxillary fixation with an arch bar and using a mini plate screw system. Under local anesthesia, arch bar was applied and intermaxillary fixation was achieved with elastics. The mucoperiosteal flap was removed in the left parasymphysis region. For the reduction of the fracture, 2 4-hole miniplates and 8 monocortical screws were applied.

Conclusion: Combined mandible fractures can often develop in different parts of the mandible depending on the direction of the force due to high-intensity forces. Although different treatment options have been described, it has been observed that adequate stability is achieved by treating the condyle fracture conservatively and the other fracture with open reduction in combined fractures including the condylar neck without displacement in the fragments.

Keywords: intermaxillary fixation, mandible fractures, open reduction

intraoperative intraoral view

intraoperative intraoral view 2

intraoperative intraoral view 3

postoperative intraoral view

preoperative radiography

OP-009
Management of Mandibular Fractures: Case Series

Timuçin Baykul, Yavuz Fındık, Tayfun Yazıcı, Cihan Varol, Eray Murat Keleş
Department of Oral and Maxillofacial Surgery,Süleyman Demirel University Faculty of Dentistry

Objective: Mandible fractures are among the most common fractures in the maxillofacial region. The most common causes of mandible fractures are traffic accidents, falls, fights and sports injuries. Trauma-related mandibular fractures can occur in many types and their incidence may vary from region to region. The incidence of mandible fractures is 29.5% in the corpus, 27.3% in the angulus, 21.1% in the condyle, 19.5% in the symphysis and parasymphysis, 0.2% in the coronoid process and 2.4% in the ramus. The treatment of these fractures can also vary from case to case.

Case: In this case report, patients who applied to Süleyman Demirel University Faculty of Dentistry, Oral and Maxillofacial Surgery Clinic in 2021 with the complaint of mandible fracture will be presented. Open reduction internal fixation approach with the help of mini plate-screw or intermaxillary fixation was applied in patients who were determined to have mandibular fractures after radiological and clinical examination. After the procedure, the patients were followed up radiologically and clinically.

Conclusion: The traditional treatments for mandible fractures are open reduction and closed reduction. The age of the patient, the localization of the fracture, the type of fracture and the systemic condition of the patient are effective in determining the treatment method. Effective results can be obtained in both approaches in appropriate indications.

Keywords: Facial trauma, Mandible fractures

OP-010
Management of Bimaxillary Alveolar Deficiency with LeFort I Osteotomy, Interpositional Grafting and Shell Technique

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[1]*Oral and Maxillofacial Surgery Department, School of Dentistry, Ankara University, Ankara, Türkiye*
[2]*Oral and Maxillofacial Surgery Department, School of Dentistry, Gazi University, Ankara, Türkiye*
[3]*Oral and Maxillofacial Surgery Department, School of Dentistry, Dokuz Eylül University, İzmir, Türkiye*

Objective: Implant surgery has become an indispensable treatment modality for edentulous patients. In edentulous jaws, alveolar component may be lost, leading to changes in the facial profile and occlusion and causing functional problems for the patient. To restore the patient's facial contours and occlusion and functionality of the jaws, careful planning and use of different grafting techniques may be needed.

Case: A 52-year-old male presented with complaints of unstable dentures and mastication problems. Clinical examination revealed decreased height of the lower face and Class 3 facial profile due to severe resorption. Radiological examination with CBCT revealed severe resorption in the maxilla up to the sinus floor and floor of the nasal cavity and significant resorption in the mandible where the mandibular canal was exposed on top of the alveolar crest. A treatment plan including LeFort I osteotomy, interpositional grafting and shell technique were determined. Maxilla was positioned 5 mm anteriorly and inferiorly, autogenous grafts obtained from the iliac crest was used to augment the sinus floor and the nasal floor; also as an onlay graft to horizontally augment the maxilla. Mandibular reconstruction was performed with shell technique using grafts harvested from the ramus. Implants were inserted after six months and the prosthetic rehabilitation was provided with fixed prostheses.

Conclusion: Elongated periods of edentulousness may cause serious bone loss but meticulous planning and successful application of augmentation techniques may provide esthetically and functionally satisfying results.

Keywords: interpositional grafting, LeFort I osteotomy, shell technique

OP-011
An Implant Supported Obturator for Hemi-maxillectomy Patient: A Case Report

Gökhan Gürses[1], Fulya İdil Ömeroğlu Akkoç[1], Necla Demir[2], Aslı Ataseven[1], Ahmet Aktı[1], Abdullah Kalaycı[1]

[1]Selcuk Unıversity Faculty of Dentistry Department of Oral and Maxillofacial Surgery, Konya
[2]Selcuk Unıversity Faculty of Dentistry Department of Prosthodontics, Konya

Objective: Adenoid cystic carcinoma is 1% among all head and neck malignancies, 10% among all salivary gland malignancies, the most common 6-7 decade. It is seen in women more frequently and often in the head and neck parts.Nowadays,the main treatment of ACC is surgery.This case report presents the rehabilitation of a patient with an implant-supported obturator following maxillary hemi-section due to adenoid cystic carcinoma(ACC).

Case: The 67-year-old female patient applied to our clinic for prosthetic rehabilitation. The patient had previously undergone right hemi-maxillectomy for adenoid cystic carcinoma in another center. Implant supported obturator treatment was planned for the patient. A total of six implants were placed, four in the maxilla and two in the mandible. After the implant osseointegration was completed, an obturator which was supported by the dental implants was applied. The patient has been followed up for four year. During this period, many time implants failed. New implants were placed instead of them. The obturator has not been completely renewed, it has been adjusted twice by making changes in it.The patient still uses her implant supported obturator even after four years.

Conclusion: Implant supported obturators are a good option for the treatment of such resective surgeries. They rehabilitate the patient's lost functions such as speech and chewing well.

Keywords: adenoid cystic carcinoma, hemi-maxillectomy, obturator

OP-012
Ameloblastic Fibroma: A Case Report

Ahmet Aktı[1], Ziya Ozan Cengiz[1], Ömer Erdur[2], Gökhan Gürses[1], Aslı Ataseven[1], Rabia Çömlekçioğlu[1]

[1]*Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Selçuk University, Konya, Turkey*

[2]*Department of Otorhinolaryngology, Faculty of Medicine, Selçuk University, Konya, Turkey*

Objective: Ameloblastic fibroma (AF) is rare benign odontogenic tumour which usually occurs in the first two decades of life. It can occur either the mandible or maxilla but it is most frequently found in the posterior region of the mandible. It is characterized by epithelial islands and cords immersed in ectomesenchyme that mimics the dental papilla and enamel organ but without actual hard tissue formation.

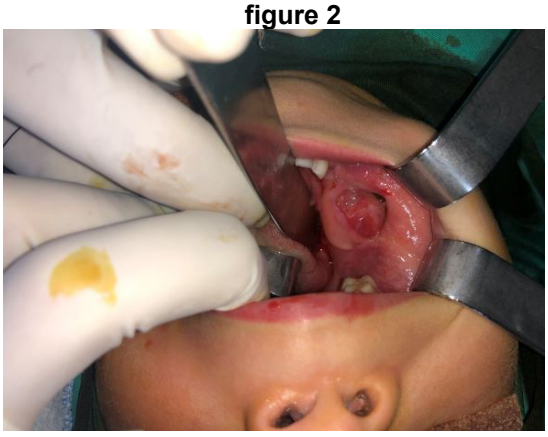
Case: A 6 year-old female patient applied to our clinic because of swelling in the mouth. The patient's medical history did not include a history of prior trauma to the affected area or episodes of pain. Enucleation of the tumor was performed under general anesthesia, followed by curettage of the surrounding bone and adjacent teeth were removed. The surgical specimen was fixed in formalin and sent for histopathological analysis. Case; It was diagnosed with ameloblastic fibroma in the light of morphological and immunohistochemical examinations.

Conclusion: Although AF is a rare tumor, it is more prevalent in children's jaw. In this case, taking into account the patient's age, we performed enucleation with thorough curettage, removing all the unerupted molars. Patients with AF must be followed up for a long period because of AF's ability to transform into ameloblastic fibrosarcoma which is the malignant compartment of AF. In this case, the patient has continued to be followed frequently and has been disease-free for 1 year.

Keywords: Ameloblastic Fibroma, Benign tumors, Enucleation

figure 1

figure 2



OP-013
Midfacial Reconstruction With an Extraoral Implant: A Case Report

Ahmet Aktı[1], İzzet İlker Aydoğan[1], Abdullah Kalaycı[1], Gökhan Gürses[1], Serhan Akman[2]

[1]*Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Selçuk University, Konya, Turkey*

[2]*Department of Prosthodontics, Faculty of Dentistry, Selçuk University, Konya, Turkey*

Objective: In our case report, a 66 year-old female patient was referred to our clinic for the rehabilitation of a large midfacial defect for second time. After 10 years from the first surgery patient started to complain about her prosthesis because of implant failure.

Case: History revealed that the patient had been operated on for basal cell carcinoma that occurred in her nasal skin in 1994. The residual defect included total loss of the midface bilaterally. In the first implant surgery in 2011, patient had 3 implants. 1 in right zygomatic arch, 1 in left tuberosity and third was in the glabellar region of frontal bone. When patient came to our clinic, the glabellar implant had failed because of infection after 10 years. A new implant placed in glabella and location was nearly 2 mm above the old site. Framework of the prosthesis was modified for new glabellar implant.

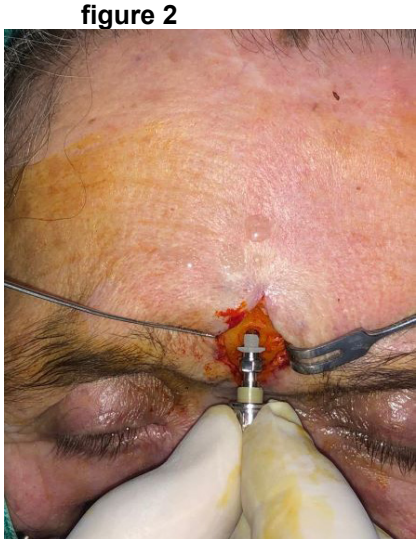
Conclusion: The resection of tumors can lead to extensive craniofacial defects involving ears, eyes, and nose. An autogenous reconstruction is not always possible in an esthetically adequate way.Facial rehabilitation using extraoral implants is ideal for replacement of areas such as nose, and face and depends essentially on the size and defect region.

Keywords: Extraoral implant, Midfacial prosthesis

figure 1

new glabellar implant site is on top.old one is on bottom

figure 2



Glabellar implant before insertion

OP-014
Treatment of Odontogenic Keratocyst Cases with Marsupialization. A Case Series

Serkan Yıldız[1], Mehmet Kemal Tümer[2]
[1]*Private Practice*
[2]*Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Alanya Alaaddin Keykubat University, Antalya, Turkey*

Objective: The odontogenic keratocyst (OKC), previously known as keratocystic odontogenic tumor has been the most disputable pathologies of the maxillofacial region. Patients with OKC are often asymptomatic but may present with pain, swelling, or discharge. Many treatment modalities have been proposed in the literature for the management of OKCs. Despite the aggressive nature, previous literature as early as 1970s reported the fact that parakeratinized OKC can be treated by means of marsupialization alone. In this case series, we aimed to present OKC cases treated with marsupialization.

Case: This case series consists of patients who were sent to the OMFS Clinic for the treatment of radiolucent lesions detected on radiography. First, aspiration biopsy was applied to the patients and marsupialization was applied to the patients with the diagnosis of OKC. A marsupialization tube was made from the aspirator tip or tube into the cyst cavity of 7 patients, and marsupialization was performed at different times, lasting from 6 months to 2 years. Cystic lesions shrank in all 7 patients and enucleation or curettage was not performed in any of the patients. No recurrence was detected in the follow-ups of the patients at intervals of 2 to 5 years.

Conclusion: As a result, it has been observed that OKC cases of different sizes can respond to simple treatment procedures such as marsupialization. If the marsupialization procedure fails in OKCs, other options should be considered. In addition, long-term follow-ups are needed to see the long-term consequences of marsupialization, such as recurrence, in OKCs.

Keywords: odontogenic keratocyst, marsupialization

OP-015
Recurrent TMJ dislocation in a mentally retarded patient treated by multidisciplinary approaches

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Objective: Bilateral nontraumatic temporomandibular joint (TMJ) dislocation is an acute situation which may cause a chronic and recurrent condition.

Case: This case report outlines the novel management of a 17-year-old mentally retarded patient who presented with recurring TMJ dislocation. The dislocated jaw was reduced using Hippocratic maneuver under intravenous sedation. Initially, lateral pterygoid muscle was realized using the nerve stimulator. Botulinum toxin injections were given to lateral pterygoid muscles using extra oral approach. Temporomandibular joint dislocation occurred again 4 months after the first attempt. The patient underwent botolium toxin injections using computed tomography guidance to better establish the heads of lateral pterygoid muscles. The recurrence was not observed during the 6 weeks follow-up period.

Conclusion: Management of recurrent TMJ dislocation can be complicated in mentally retarded patients. Guided botulinum toxin injection to lateral pterygoid muscles was a successful conservative treatment approach within a 6 month follow-up time in our case.

Keywords: Dislocation, Recurrent, TMJ

OP-016
Interdisciplinary treatment with orthognathic surgery and implant-supported prostheses in a skeletal classIII patient with ectodermal dysplasia: A clinical report

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Objective: Ectodermal dysplasia (ED) is a congenital syndrome characterized by anomalies in ectodermal tissues such as skin nails, hair and teeth. Dental rehabilitation is necessary for these patients to be able to perform functions such as speaking, swallowing and chewing.

Case: A 25-year-old female presented severe hypodontia due to hypohidrotic ED was treated with bimaxillary surgery to correct skeletal maxillomandibular deficiency.
Six months later orthognathic surgery, 4 implants were placed in the mandible with the all on four concepts. Three months after the second surgery, screw-retained metal ceramic was fabricated. The definitive rehabilitation consisted of a mandibular fixed dental prosthesis supported by dental implants and a maxillary tooth-supported full mouth restoration to restore the patient to esthetics and function

Conclusion: The treatment of patients with severe hypodontia due to ectodermal dysplasia differs according to their anatomical and dental conditions. Required multidisciplinary treatment planning is necessary for the successful rehabilitation of such cases. The follow-up data showed that dental implants with orthognathic surgery should be considered as a good treatment modality for patients with ED.

Keywords: Ectodermal dysplasia, interdisciplinary, treatment

OP-017
Pathological Mandibular Fracture After Implant Placement: A Case Report

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Objective: Implant surgery has become a routine treatment procedure in dentistry. Success of this treatment has been approved over the years however, various complications have also been reported. As one of these complications, mandibular fracture is rarely observed and usually associated with resorbed alveolar crest, and surgical or prosthetic planning. This case presents a mandibular fracture in implant site and treatment steps of this complication.

Case: Fourty-two year-old female patient reported a severe pain was referred by a private dental clinic to Department of Oral and Maxillofacial Surgery, School of Dentistry, Ege University. The patient was treated with implant-supported prosthetic rehabilitation and radiological examination revealed a pathological fracture involving one of the anterior implant. The implant (with diameter of 4.2-mm and 11.5-mm length) was removed and the fracture was fixed with an five hole, standard, titanium plate. Then, the bone segments were augmented using the block and particulate xenograft, and covered with resorbable collagane membrane. Of six-months follow-up, the fracture healed and no adverse complication was reported. The plate and two adjacent anterior implant with a similar size were removed and three implants with diameter of 3.3-mm and 10-mm length were placed based on revised prosthetic planning.

Conclusion: Failure to selection of implant size and prosthetic rehabilitation can lead to harmful stress through the resorbed bone and its resulted with unexpected fracture. Therefore, it is suggessted that analysis of existing bone volume before implant treatment and its support with adequate surgical and prosthetic planning are necessary.

Keywords: Implant, fracture, treatment

OP-018
Removal of a Crown Displaced into the Infratemporal Fossa: A Case Report

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Objective: The most common places of displacement during surgical intervention are the infratemporal fossa, the pterygomandibular space, the maxillary sinus, the buccal space, or the lateral pharyngeal space. In this case, the displaced dental crown has been removed from the infratemporal fossa by protecting the anatomical structures.

Case: A 36-year-old female patient referred to our hospital with a trismus and pain on the right side of her face. Three weeks ago in another clinic, the dental crown of the maxillary upper second molar has been displaced into the ITF during a crown removal procedure was recorded at her anamnesis. We confirmed the position of the crown by radiographic examination using panoramic radiography and cone-beam computed tomography. Then the crown was removed intraorally by expanding the flap and dissecting the soft tissue very carefully under general anesthesia.

Conclusion: Accidental displacement of a crown into the infratemporal fossa (ITF) is an unusual situation and requires greater precision. Otherwise, it may have cause serious complications because of the surrounding anatomical structures.

Keywords: Displacement, Crown, Infratemporal Fossa

OP-019
Surgical management of Craniofacial Fibrous Dysplasia

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Objective: Fibrous dysplasia is a non-neoplastic condition in which normal bone are replaced by fibrous tissue and haphazardly distributed woven bone which result in bone deformity, the disorder became known as "fibrous dysplasia" in 1938 when Lichtenstein introduced the term.

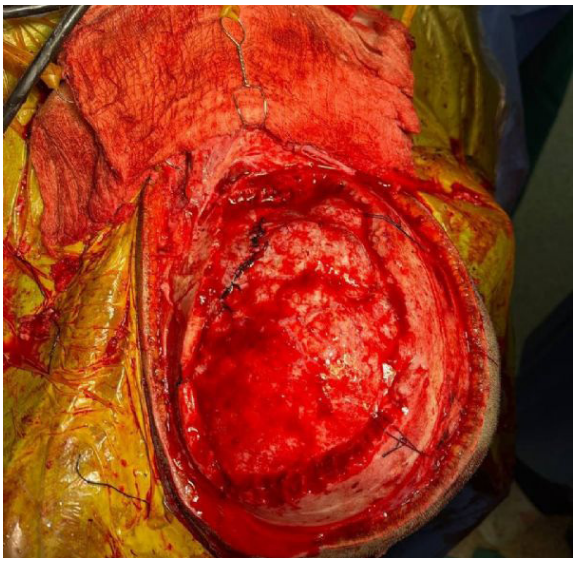
Case: A 20 – years old female presented with five years history of hard huge swelling over the occipital and right temporal region, the swelling was painless, non-pulsatile and non-tender. An x-ray film of skull and computed tomography scan of the head revealed an expansive lytic lesion with thinning of the cortex and ground-glass appearance, suggestive of monostatic craniofacial fibrous dysplasia. The case discussed by the neurosurgeon and maxillofacial surgeon for drawing the treatment plan, because the lesion was involved all layers of cranial bone thickness with huge cranial deformity and the bone growth was stopped at this age the decision was radical resection of lesion and reconstruct the defect by titanium mesh. The surgical operation started with large posterio-cranial flap to expose and exam the lesion which documented that full thickness of bone was involvement, the neurosurgeon resected the lesion which was serious step because the lesion closely attached to sagittal sinus, after that the maxillofacial surgeon reconstructed the large cranial bone defect, this step was very difficult and challenge for recontouring and maintain the skull shape.

Conclusion: The result of surgical management was challenge and fantastic for complete resection of lesion and cosmetic cranial reconstruction.

Keywords: Fibrous Dysplasia Craniofacial fibrous dysplasia

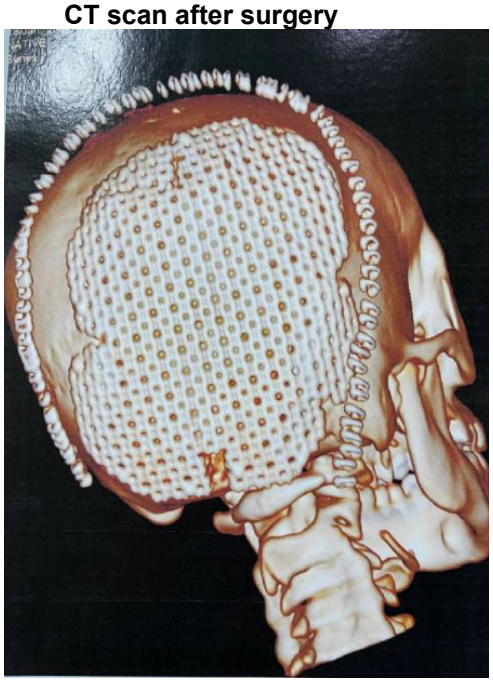
CT scan of cranial fibrous dysplasia

Cranium after radical lesion resection



Cranium reconstruction with titanium mesh

CT scan after surgery



OP-020
A rare case of oral verrucous carcinoma; Surgical approach and literature review

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Objective: Verrucous carcinoma (VC) is considered a low-grade variant of squamous cell carcinoma frequently presenting at the oral mucosa and skin. Most VC are identified in the oral cavity, others are identified in the larynx, sinonasal tract, and pharynx. Oral VC clinically exhibits a proliferative or cauliflower-like appearance. The lesion, which is usually seen in the buccal mucosa, may progress to areas such as the gingiva, tongue and hard palate over time. Etiologically, in the reported literature cases; smoking, alcohol and opportunistic viral infections have been reported.

Case: An 84-year-old female patient who applied to our clinic with the complaint of soft tissue growth covering the entire buccal mucosa starting from the midline of the maxillary left lip mucosa and extending to the tuber was included. As a result of the biopsy examination in the oral pathology laboratory, it was reported that it showed findings compatible with VC as a preliminary diagnosis. Considering the pathology result, the lesion was cleaned with wide resection (0.5-1.5 cm), since the primary treatment protocol for verricous carcinoma is surgery. The removed tissue (6*2.5*0.3 cm) was sent to pathology for the second time and the first diagnosis was confirmed.

Conclusion: Although there is still no established treatment protocol for VC, surgical treatment is used as the first choice. There is controversy over surgical margins and adjuvant radiotherapy. Creating a treatment protocol for VC treatment is a necessity for both patients and surgeons.

Keywords: Oral Cavity, Oral Verrucous Carcinoma, Surgical Treatment

OP-021
Ultrasound-Guided Arthrocentesis and Intra-articular Injection of Hyaluronic Acid in Patients with Temporomandibular Disorders

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Objective: Ultrasound assissts to physician in visualizing the temporomandibular joint and its surrounding structures for application of either arthrocentesis nor intra-articular injection. This case series present the efficiency of ultrasound-guided arthrocentesis plus intra-articular injection of hyaluronic acid (HA) in patients with temporomandibular disorders (TMD).

Case: Nine patients, suffering from constant pain affecting daily activity and limited mouth opening, were treated in Department of Oral and Maxillofacial Surgery and Department of Oral and Maxillofacial Radiology at Ege University, School of Dentistry. According to guideline of The Diagnostic Criteria for TMD (DC/TMD) patients were diagnosed and categorized as follows: seven of them disc displacement without reduction (DDWoR) and two of them DDWoR + osteoarthritis (OA). Treatment procedure consisted of arthrocentesis with two-needle technique and intra-articular injection of HA, by ultrasound guidance. The number of attempts of needle manipulation were recorded perioperatively. Visual analog scale (VAS) for pain, and measurement of maximum mouth opening (MMO) were assessed at preoperatively, 2nd and 4th weeks.

Conclusion: The physicians reported fewer needle reposition during arthrocentesis and better wash-up of articular space even in the narrowest joint spaces in two patients with DDWoR + OA. There was a significant improvement both in pain intensity and MMO at postoperative 4th weeks. Despite these short-term outcomes, it might be mentioned that ultrasound-guided arthrocentesis plus intra-articular injection of hyaluronic acid is an effective treatment for TMD-patients, both in decreasing pain and improving MMO.

Keywords: Arthrocentesis, hyaluronic acid, ultrasound

OP-022
CT and MRI spectrum of findings in medical-related osteonecrosis of the jaws

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Objective: Medical-related osteonecrosis of the jaws (MRONJ) is a well-described clinical condition with consistent radiographic evaluation. CT scans could identify findings, but they are not specific for MRONJ. MRI could demonstrate the bone marrow changes associated with edema or inflammation resulting from increased water content, replacing normal fatty marrow. The purpose of this study was to review MR and CT to offer important diagnostic, prognostic, and therapeutic information associated with MRONJ.

Materials-Methods: Ten patients with a clinical history of pain, suppuration, and swelling in the mandible or maxilla were referred to the Department of Oral and Maxillofacial Surgery, Hacettepe University. All patients had the usage of antiangiogenic or antiresorptive agents. CBCT and MRI were compared and evaluated separately with clinical findings. Subsequently, all patients underwent surgical removal of the affected bone after consulting with oncology doctors. The biopsy confirmed osteonecrosis.

Results: CT displayed osteolytic lesions with involvement of the cortical bone. MRI demonstrated the characteristic features of osteonecrosis and the edema of soft tissues by supporting the CT results.

Conclusion: Medical-related osteonecrosis of the jaws presents a wide variety of CT and MRI features that readily recognize and determine the disease's extent; however, they are not specific for the disease. To the best of our knowledge, a few studies compare CT and MRI findings in the literature, and the superiority, so more studies should be done with MRI findings to increase the operation success by better radiological diagnosis.

Keywords: MRONJ, MRI, CBCT

OP-023
Custom-made subperiosteal implant for rehabilitation of atrophic jaw in a patient with rhabdomyosarcoma in left infratemporal fossa - A case report

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Objective: Rehabilitation of atrophic jaws with endosseous implant-supported overdentures and immediate loading procedures are still one of the biggest challenges in oral and maxillofacial surgery procedures. Custom-made subperiosteal implants with immediate loading overdenture could be a good solution for atrophic jaws rehabilitation.

Case: The authors describe the case of a 21-year-old female with a history of rhabdomyosarcoma of infratemporal fossa when she was 7. After radiotherapy, brain radiation induces reduction of pituitary and reproduction-related hormone secretion. So; due to micrognathia -due to failure to thrive- and multiple teeth missing -due to radiotherapy- patient needed custom-made subperiosteal implant rehabilitation. The patient was successfully treated with maxillary custom-made subperiosteal implant with an innovative design, combining subperiosteal and endosseous support.

Conclusion: The authors consider the advantages of the custom-made subperiosteal implants, such as single-stage procedure with immediate loading in atrophic jaws, less time-consuming technique and an option for failed rehabilitation techniques. More long-term follow up studies with large samples of patients will be necessary in the future.

Keywords: atrophic jaw, rhabdomyosarcoma, subperiosteal implant

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OP-024
Evaluation of the effectiveness of different fixation techniques in 10 mm mandibular advancement

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Objective: The aim of this study is to evaluate the effects of different fixation techniques on stabilization and stress distributions by finite element analysis in mandibular models with 10-mm-advancement by performing sagittal split ramus osteotomy.

Materials-Methods: Four fixation methods were applied to the mandible. A 4-hole 2.0mm standard miniplate and one bicortical screw were applied to the first model (1P1B), two 4-hole 2.0 mm standard miniplates to the second model (2P), three inverted L-shaped bicortical screws to the third model (3B), and a 4-hole miniplate with increased thickness and one bicortical screw to the fourth model (1RP1B). A static vertical load of 200N was then applied to each model from the occlusal of the first molar.

Results: The maximum and minimum principle stresses on the bone were observed more in the proximal segment close to the osteotomy line in all groups. The maximum von Mises stresses were 2705.21MPa, 1633.56MPa, 1121.4MPa and 1734.44MPa for the 1P1B, 2P, 3B and 1RP1B groups, respectively. The displacement values were 1.92mm, 1.15mm, 0.79mm and 1.42mm for the 1P1B, 2P, 3B and 1RP1B groups, respectively.

Conclusion: The reinforced plate contributed to the stabilization, but it was not as effective as the three bicortical screws and the double plate application.

Keywords: finite element analysis, fixation, sagittal split ramus osteotomy

OP-025
The evaluation of antibiotic knowledge and resistance awareness; an online survey of managing acute dental pain

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Objective: This study aims to measure dentists' antibiotic/prophylaxis knowledge and awareness of antibiotic resistance based on two case scenarios. Also, we evaluated the differences among gender, graduate year, specialty/PhD and workplace.

Materials Methods: Dentists in Turkey are invited by open invitation posts on various social media applications. The scoring was shaped based on the questions asked to measure antibiotic/prophylaxis knowledge. The collected data were statistically analyzed by Sigmaplot 14 software.

Results: 274 participants who answered all fourteen questions included in the study. A statistically significant difference was found in the evaluations made according to the gender, title, graduation year and workplace.

Conclusion: It has been observed that dentists in Turkey do not have sufficient knowledge about antibiotics/prophylaxis and prescribe antibiotics in irrelevant cases. This difference can be observable especially in dentists who graduated 10 years or more ago.

Keywords: antibiotic knowledge, dentistry, online survey

OP-026
Investigation of the Stress Distribution of the Occlusal Splints of Different Thickness on the Temporomandibular Joint

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Objective: TMJ disorders (TMDs) can be caused by abnormal stresses from insertion and one of the main methods used in the treatment is occlusal splints. The aim of this study is to compare the stresses of 3 and 6 mm thick splints on TME with finite element analysis (FEA) and to determine the ideal occlusal splint thickness.

Materials-Methods: TME model was obtained by using computed tomography (CT) data. Using this model, 3 different models were obtained with occlusal splints with 3 and 6 mm vertical thickness and a model with no occlusal splint. The loading conditions were determined by assigning anatomical muscle strength and vectors.

Results: In all models, the intensity of stress on the TMJ disc is concentrated on the lateral side between the anterior and middle bands of the disc. In models with occlusal splint, the stress intensity on the disc is spread towards the middle band and the amount is decreased. The stress density in the condyle head and fossa is concentrated on the surfaces corresponding to the anterior and middle band of the TMJ disc. In the occlusal splint models, the density and amount of stress decreased in the condyle and fossa. The 6 mm occlusal splint resulted in less stress intensity than the 3 mm model.

Conclusion: The use of occlusal splints in the treatment of TMDs reduces stress in TMJ. The use of occlusal splints in increasing vertical thickness may be more useful in reducing stresses occurring in TMJ.

Keywords: finite elements analysis, occlusal splint, temporomandibular joint

OP-027
Characteristics of patients who applied to Oral and Maxillofacial Surgery Clinic and Algology Clinic with Head and Neck Pain

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Objective: Pain in the head and neck region has various causes. Toothache, temporomandibular joint pain, trigeminal neuralgia are some of the most common causes of these conditions. Patients resort to various methods and different specialists from many different fields to relieve the pain they suffer from. The aim of this oral presentation was to summarize the approaches of oral and maxillofacial surgeons and algologists for pain in the head and neck region, and the characteristics of patients with descriptive statistical methods.

Materials-Methods: Data were obtained from 125 volunteers who applied to the Oral and Maxillofacial Surgery Clinic(OMFSC) and the Algology Clinic(AC) between 2015-2020 for pain in the head and neck region.

Results: While 36.2% of the patients who applied to the AC applied with the complaint of Headache, 59.7% of the patients who applied to the OMFSC were complaining of Jaw-Face Pain. The most frequently diagnosed diagnoses were 'Trigeminal Neuralgia' in the OMFSC with 55.2%, and the 'Neck Pain' in the AC with 44.8%. Trigeminal neuralgia was the most common diagnosis with 46 cases, and this was generally described by patients as Jaw-Face pain. In addition, only 4 of 23 patients who applied with the complaint of toothache were the real source of pain and they were often confused with temporomandibular joint pain(n=11) and trigeminal neuralgia(n=7).

Conclusion: Pain in the Oral and Maxillofacial region can have various causes, clinicians should be careful in diagnosing these pains and consider many possibilities.

Keywords: Algology, Pain, Diagnosis

OP-028
Comparison of Clinical Findings with Magnetic Resonance (MR) Imaging Results in Patients with Temporomandibular Joint Disorder

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Objective: In this study, it was aimed to compare the clinical findings of patients with TMJ disease and the diagnoses made by MR imaging.

Materials-Methods: This retrospective study was carried on 235 patients between the ages of 18-60 who applied to Van Yüzüncü Yıl University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery with the complaints of temporomandibular joint (TMJ), clenching, noise, pain in front of the ear, jaw locking, difficulty in opening the mouth. Patients who had forms with detailed anamnesis, VAS values and clinical findings which were recorded, and had magnetic resonance images were included in the study. Based on T1 and T2 weighted spin-echo images of 470 joints in open and closed positions, MRI results were evaluated according to the routine reporting protocol. The relationship between clinical diagnosis and MRI findings was evaluated statistically.

Results: 235 patients, 80% of whom were female and 20% male, included in the study and the mean age of them was 26.8 years. When a total of 470 joints (right or left) were examined, it was observed that 197 joints had internal derangement, 38 joints had hypermobility, and 235 joints were normal. Among 235 patients, there were 36 patients with bilateral joint sound and internal derangement in both the right and the left joints.

Conclusion: MR imaging has been shown to be more effective than clinical symptoms in diagnosing internal derangements.

Keywords: TMJ disorder, MRI

OP-029
Degenerative Temporomandibular Joint Disorders Treated with Custom Fossa-Eminence Hemijoint Replacement: Two Case Reports

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Objective: The objective of this case report is to evaluate the clinical and functional outcomes of custom fossa-eminence hemijoint prosthesis in two patients with degenerative temporomandibular joint disorders (TMD) who have failed to respond to conservative and minimally invasive treatments.

Case: The first case was a 62 years old female, presented with focal pain localized in the preauricular area for a year. Clinically, she had a mouth opening of 15 mm with deflection of the mandible to the right. Subchondral cystic cavities were noted during CT evaluation. The second case was a 33 years old female, presented with severe pain localized in the preauricular and masseteric area with a mouth opening of 14 mm. DICOM data from recent CT scans were sent to METÜM (Gülhane Medical Design and Production Center, University of Health Sciences) and a design of perfect-fit fossa-eminence prosthesis was obtained virtually. After the surgeon and engineering team had been satisfied, chrome/cobalt implant was manufactured. The arthroplasty of degenerated articular surfaces was performed with the preauricular approach, then the custom-made prosthesis was implanted with 3 titanium screws. The stability of prosthesis and jaw movements were checked. To prevent friction and avoid dead space, dermis-fat pad was obtained from the abdomen and used inter-positionally. Post-operative 4 months and 6 months follow-ups are present respectively.

Conclusion: Total arthroplasty of TMJ with custom fossa-eminence hemijoint replacement may provide satisfactory clinical and functional outcomes for degenerative TMJ diseases for indicated cases.

Keywords: alloplastic joint replacement, degenerative temporomandibular disease, fossa-eminence prosthesis

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OP-030
Investigation of stresses of poly-ether-ether-ketone implants in the surrounding bone by finite element analysis

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Objective: Selection of the ideal material for oral endoosseous implants; towards the end of the 1960s, it was pure titanium as defined by Branemark. However, the demand of patients and the disadvantages of titanium have pushed clinicians to search alternative materials. The aim of our study was to evaluate the use of 30% Cfr-Peek (carbon fiber reinforced polyether ether ketone) and 60% Cfr-Peek materials as an alternative to traditional titanium dental implants.

Materials-Methods: In this study; single-tooth dental implants of 30% Cfr-Peek, 60% Cfr-Peek and titanium materials were modeled in each of maxillary anterior, maxilla posterior, mandibular posterior regions. The study was carried out by using static sand lineer three dimensional finite element stress analysis. Following application of vertical and oblique occlusal forces in these models, Von Misses stress, maximum principal stress and minimum principal stress values and stress distributions in the implant, cortical bone and spongious bone in each of the 5 scenarios were examined.

Results: Maxillary posterior single implant model was the most stress-inducing scenario on the bone.30% Cfr-Peek implants stress in the surrounding bone is higher than titanium and 60% Cfr-Peek implants. Titanium and 60% Cfr-Peek implants exhibited biomechanically similar behavior and these implants conducted stresses to bone more homogeneous than 30% Cfr-Peek implants. Oblique forces was found more destructive than vertical forces and denser bone structure shows better stress distribution against incoming forces

Conclusion: For the routine use of this new materials as a dental implant material; further animal and long-term clinical studies are needed.

Keywords: Dental implant, Cfr-Peek, Finite elemental analysis

OP-031
Treatment of Osteogenesis Imperfecta Related TMJ Necrosis

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Objective: Osteogenesis imperfecta (OI) is a rare, heritable connective tissue disorder, characterized by fragile bones, which results in an increased risk of fractures from low energy trauma. Bone fragility with deformities is the hallmark of OI but varies widely in severity. Extraosseous manifestations including, blue sclera, joint hypermobility, and vascular fragility. Oral manifestations of OI include the classic finding of dentinal abnormality, impaction and missing of teeth, abnormal eruption development, and relative mandibular prognathism.

Case: A twenty-year old Somalian male patient referred to our clinic with multiple extraoral fistulas located in the left parasymphysis region, right mandibular posterior and right temporomandibular joint region. CT images showed multiple impacted teeth associated with the disseminated osteomyelitis of the mandible. All the fistulas showed drainage and patient was consulted to infectious diseases department for antibiotic therapy and a two stage surgery was planned. First one was intended for removal of the mandibular impacted teeth and related necrotic bone, and as the second surgery TMJ condylectomy and fat grafting was performed.

Conclusion: Osteogenesis imperfecta is characterized by multiple problems in the maxillofacial region. Better understanding of the dental effects of OI would be helpful for preventive interventions and possible bisphosphonate therapy should also be evaluated. Treatment of severe osteomyelitis is much more challenging in patients with OI, to avoid from these symptoms to occur or worsen, the patients should be assessed regularly and evaluated multidisciplinary.

Keywords: TMJ, Osteogenesis imperfecta

OP-032
Finite Element Analysis Of The Biomechanical Effects Of Titanium And Cfr-Peek Additively Manufactured Subperiosteal Jaw Implant

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Objective: The aim of this study is to examine the stresses that will occur under occlusal forces on the cortical bone, spongious bone and the subperiosteal implant systems made of titanium and %60 Carbon fiber reinforced Polyether ether ketone (PEEK) material.

Materials-Methods: Two different models of subperiosteal implant systems made of Titanium and %60 Carbon fiber reinforced Polyether ether ketone (PEEK) material. As a result of vertical and oblique forces, the stress values and distrubutions on the subperiosteal implant systems and bone were examined. After applying the three different force protocols, von Mises stress, Maximum principal stress and Minimum principal stress values and distribution on tha subperiosteal implant body, fixation screws, cortical and spongious bone were analysed by finite element analysis.

Results: In all scenarios, the von Mises values on the Titanium subperiosteal implant system were found to be approximately twice on the 60% carbon fiber reinforced PEEK subperiosteal implant system plates. Subperiosteal implants produced from titanium and carbon fiber reinforced PEEK material exhibited similar stress values on cortical and spongious bone.

Conclusion: According to the results of this study, 60% Carbon fiber reinforced PEEK material can be considered as an alternative material to titanium since it exhibits similar biomechanical behavior with titanium subperiosteal implants on cortical and spongious bone. In order to be routinely used as dental subperiosteal implant material, it should be supported by long-term in vivo studies.

Keywords: Subperiosteal implant, Finite element method, Polyether ether ketone

OP-033
Comparison of Success Rate of Dental Implants Placed in Autogenous Bone Graft Regenerated Areas and Pristine Bone

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Objective: Autogenous bone grafting still has been considered as the ‘‘gold standard’’ and wildly used in the case of alveolar bone reconstruction. The aim of the present study is to evaluate the success rate of implants placed in autogenous block augmented ridges and implants placed in pristine bone(PB).

Materials-Methods: From 2014 October to 2019 November, 113 patients were included in this study. 53 patients were treated with autogenous block grafts and particulate bone, after 6 months of healing implant placements were performed in autogenous bone augmented (ABA) areas.In 60 patients implant placement was performed, with no need for grafting and implants were placed into the PB. Follow-up data were collected after 5 years of prosthetic loading.

Results: The cumulative implant success rate at the 5-year examination was 92.45% for the ABA group and 85% for PB group. There were 3 failed implants in the ABA group and 3 in PB group. Average marginal bone loss was 1.47 mm on ABA group and 1.58 mm on PB group. No statistically significant differences for pain, exudation from peri-implant space, implant mobility, implant success, peri-implant bone loss parameters, and patient satisfaction level were found between groups obtained data demonstrated that the success rate of implants placed in regenerated areas are very similar to the success rate of implants those placed in PB.

Conclusion: The obtained data demonstrated onlay graft regeneration is a predictable technique to allow the placement of implants in atrophic areas.

Keywords: Autogenous Bone Graft, Dental Implants, Reconstruction

OP-034
Evaluation of marginal bone loss and implant angulation in All-on-Four

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Objective: Aim of this study is to investigate the correlation between the marginal bone loss, length, and angulation of tilted implants inserted for full-arch rehabilitation according to the All-on-four concept using CBCT images.

Materials-Methods: All of the patients included in this study received dental implants according to the All-on-four concept. The follow-up time was from 6 months up to 5 years. CBCT images were obtained to evaluate the effect of angle and length of the implant on marginal bone loss. The average bone loss was compared between implants according to their angle-length measurement.

Results: The axial implants were placed approximately between 5- 15^0 and lateral implants were tilted 30-45^0. The marginal bone loss was found to be greater as the angle of the implant increased.

Conclusion: The All-on-four concept is a reliable treatment modality for severely atrophic jaws. Unlike the current literature information, which is based on the periapical radiographs, CBCT was used in this study. Further studies with a larger sample, implants, and longer-term follow-ups are needed to confirm the results.

Keywords: All-on-Four, implant, marginal bone loss

OP-035
The effects of Curcumin and Methylprednisolone on mental nerve injury: an experimental and histopathological study

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Objective: Curcumin has the ability to promote peripheral nerve regeneration. Methylprednisolone (MP) is used for the treatment of nerve injury. S100 protein is a proliferator factor for Schwann cells which produces myelin sheath in the peripheral nerve. Beta-3 plays a key role in axonal growth. The aim of this study is to investigate the role of curcumin and MP on S100 protein and Beta-3 expression levels in healing process of nerve injury.

Materials-Methods: In this study, 30 adult Wistar rats were used. Mental nerves of the rats were crushed with a Yasargil aneurysm clip for 60 seconds. After surgical procedure, the rats were randomly divided into three groups. In control group, physiological saline solution was given whereas curcumin and MP were administered separately to the experimental group rats intraperitoneally, for 14 days. All rats were sacrificed and mental nerves removed for histopathologically immune reactivity evaluation under the light microscope. The immune reactivity and the severity of the pathological alterations were scored as no reaction (0) weak (1), moderate (2) and strong (3).

Results: Immune reactivity of S100 protein were scored as weak, moderate and strong in control, MP, and curcumin groups, respectively. Whereas, Beta-3, immun reactivity were found weak in control and moderate in both experimental groups. Nerve injury healing levels were found to be lower in experimental groups as compared with the control group.

Conclusion: Curcumin and MP have positive effects in the healing process of nerve injury by increasing S100 protein and Beta-3 expression levels.

Keywords: Curcumin, Methylprednisolone, Mental nerve

OP-036
Evaluation Of Accuracy Of Orthognathic Surgery Planning: What Was The Plan And What Happened?

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Objective: The aim of the study was to evaluate how accurately preoperative planning can be transferred to the surgery.

Materials-Method: Preoperative and postoperative lateral cephalograms of 21 patients with class III skeletal malocclusion and who had had maxillary advancement and mandibular setback surgery were recruited from the archive. The cephalograms were analyzed to determine the extent of maxillary movement with orthognathic surgery and these were compared with planned movement amounts obtained preoperatively from model surgery. Statistical analysis was performed.

Results: As a result, in 71.4% of the patients, the maxilla was found to be under-advanced than planned, in 23.8% over-advanced, and in 4.76% exactly in the planned position. The mean mismatch between the pre-surgical plans and the actual surgical change was found as -0.93 millimeters.

Conclusion: More posteriorly located mandible due to the supine position during surgery was interpreted as a possible cause of the under-advancement of the maxilla.

Keywords: Cephalometry, Model surgery, Orthognathic surgery planning

OP-037
A Rare Syndrome Presentation of a Patient Diagnosed with Orofaciodigital Type 1

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Objective: Orofasiodigital syndrome (OFDS) is a group of congenital anomalies characterized by cleft palate, high palate, tongue lobulation, tongue hamartoma, facial frontal dislocation, facial asymmetry, hypertelorism and finger anomalies (syndactyly, brachydactyly, polydactyly). Nine different types have been described. OFDS 1 is the most common type and was first described in 1954 by dentists Papillon Leage and Psaume Jean. OFDS 1 is X-linked dominant and fatal in men. OFDS1 is a rare syndrome and occurs in approximately 1/250,000 live births. The purpose of this case report is to diagnose the rare OFDS1 patient and to raise awareness about this disease.

Case: A 6 day old female baby born by cesarean section from a 21 year old G2P1A1 hypothyroid mother using insulin, was consulted to us because of bifid tongue. As a result of the examination performed in our clinic, shortness and woolly hair were detected on the third finger. As a result of genetic tests, the patient was diagnosed with OFDS1. The growth of the patient who does not have feeding problems. The patient will be operated on the tongue at 12 months of age.

Conclusions: Approximately 50% of OFDS1 patients may develop renal pathology develops in future, annual follow-up is recommended. OFDS is a rare syndrome and its diagnosis is mostly made by clinical findings. Early diagnosis of OFDS is important for the follow-up of clinical problems that may develop in the future.

Keywords: Orofasiodigital Syndrome, Tongue Lobulation, Brachydactyly

OP-038
Fish: A New Xenograft Source For Maxillofacial Grafting Procedures

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Objective: The aim of this study is to investigate the efficacy of fish-derived xenogenic graft in sinus augmentation surgeries.

Materials-Methods: In present study, 21 New Zealand rabbits were used. Autogenous (AG-Group 1), bovine derived xenogen (BXG - Group 2) and fish-derived xenogen (FXG - Group 3) grafts were placed in the right and left sinuses of rabbits. Three animals from each group were sacrificed on the 28th day, and the other 4 animals were sacrificed on the 56th day. Histological and Micro-CT examinations of the samples were performed. $p<0,05$ was considered statistically significant.

Results: In histological and Micro-CT examinations, no statistically significant difference was found between the 3 groups in terms of new bone formation. ($p>0,05$)

Conclusion: Due to best of our knowledge; present study is the first study that investigate effects of FXG in sinus lift procedures. Results of the present study showed that FXG have similar effects on bone healing compared to BXG and AG. It is predicted that FXG can be used in sinus augmentation procedures.

Keywords: Bone augmentation, Fish, Graft

OP-039
Odontogenic cysts in paediatric population according to new World Health Organization classification

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Objective: The aim of this study was to evaluate the spectrum of odontogenic cysts in paediatric population based on the 2017 World Health Organizations (WHO) classification.

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

Results: Eighty four lesions were diagnosed in 78 patients (33 female, 45 male). The mean follow-up time was 51.6 + 45.3 months. The mean age was 13. 3 + 3.5 years. There were 46 (54.8%) dentigerous cysts, followed by 20 radicular cysts (23.8%), and 16 odontogenic keratocysts (19%). Multiple keratocysts (n=9, 10.7%) were seen in 3 patients (3.8%) with Gorlin syndrome. The majority of the lesions (n=83, 98.8%) were treated by enucleation. Three lesions (3.6%) showed recurrence.

Conclusion: In conclusion, within the limitations of this study, odontogenic cysts in paediatric population showed different spectrum compared with the studies involving general population.

Keywords: paediatric, WHO 2017classification, odontogenic cysts

OP-040
Assessment of Lower Face Esthetics in Virtually Planned Patients after Orthognathic Surgery

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Objective: Aim of this study was to evaluate the effect of the amount of mandibular rotation and surgical movement on lower face esthetics.

Materials-Methods: Pre-operative and 6 months post-operative CBCT scans of 30 patients who underwent Le Fort I and BSSO surgeries were included in this study. Bilateral measurements such as bigonial and bizygomatic distance, gonial angle, face line and jaw line were performed by virtual orthognathic planning software (NemoFAB, Nemotec, Spain). Results were evaluated whether these values reached the ideal range. Clockwise or counter-clockwise rotation and its amount were taken into consideraiton, as well as the amount of surgical movement

Results: Lower facial esthetics were mostly improved after double jaw orthognathic surgery. Counter-clockwise rotation of the mandible increased the prominence of the gonial angle.

Conclusion: A period of at least 6 months after orthognathic surgery should be waited for in order to perform any additional hard or soft tissue surgery such as jaw implants and fillers, since ideal facial esthetic values for the lower face can be achieved 6 months post operatively.

Keywords: lower face esthetics, orthognathic surgery

OP-041
Does level of Horizontal Osteotomy effect complication rate and neurosensory deficit in Sagittal Split Ramus Osteotomy?

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Objective: The purpose of our study was to evaluate the level of horizontal osteotomy as a risk factor for adverse outcomes in sagittal split ramus osteotomy (SSRO).

Materials-Methods: Ninety-eight patients with dentofacial deformity who applied to the Department of Oral and Maxillofacial Surgery and underwent orthognathic surgery between August 2019 and August 2022 were evaluated. Of the 98 patients, 79 had SSRO with or without maxillary surgery and genioplasty. Sixty patients had postoperative computed tomography with 6-month follow-up. Finally, 60 patients with 120 SSRO sites were included in this study. The computed tomography scans were evaluated and classified according to level of horizontal osteotomy. Intraoperative complications such as bad split, visible damage to the inferior alveolar bundle, major bleeding, and postoperative neurosensory deficits were evaluated. These findings were analyzed and correlated with the level of the osteotomies.

Results: Thirty osteotomies were above the lingula, 55 were between the apex and base of the lingula, and 35 were below the lingula. Two bad splits were occurred, and no visible damage to the inferior alveolar bundle. There was no significant difference between osteotomy groups in terms of visual analogue scale (VAS) scores ($p>0.05$).

Conclusion: There is no relationship between the level of horizontal osteotomy and intraoperative or postoperative complications. Low medial horizontal osteotomy can be performed safely in SSRO.

Keywords: Sagittal Split Ramus Osteotomy, Orthognathic Surgery, Neurosensory deficit

OP-042
Primary Tuberculosis In The Maxilla: A Case Report

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Objective: Tuberculosis (TB) continues to be a major health problem in low and middle developed countries despite its decreasing incidence all over the world in the last decade. The most common finding of oral cavity TB lesions is ulceration, followed by swelling and abscess formation. Ulcers are usually seen as single rather than multiple, poorly circumscribed, with hard necrotic bases and gray-yellow surfaces.

Case: A 60-year-old male patient was admitted to Nyala Training and Research Hospital with the complaints of spontaneous pain in the left maxilla posterior, non-healing ulcer, gingival bleeding and bad breath for three months. Tissue sample taken by incisional biopsy was sent for histological examination. As a result of the examination, Langerhans giant cells were observed in large necrotic material and a diagnosis of necrotizing granulomatous inflammation was made. M. tuberculosis was detected in the further examinations performed in the patient, who learned that unpasteurized milk consumption was frequent. Rifampicin, pyrazinamide, isoniazid, ethambutol were started for anti-tuberculosis therapeutic drug treatment. It was observed that the patient's complaints decreased in the 1st and 2nd months of the drug treatment.

Conclusion: Tuberculosis should be considered in the differential diagnosis of chronic lesions in the oral cavity in countries with a high incidence and prevalence of tuberculosis, such as Africa.

Keywords: Drug treatment, Primary tuberculosis, Ulceration

OP-043
Evaluating the effect of different information techniques on patient anxiety before impacted third molar surgery

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Objective: Evaluating the effect of different information techniques on patient anxiety before impacted third molar surgery.

Materials-Methods: We randomly divided 240 patients who were to undergo impacted third molar surgery into two groups: The study and controls. Before the surgery, we measured the anxiety levels by using Dental Anxiety Scale (DAS) and The State-Trait Anxiety Inventory (STAI). Then we informed the patients about the procedure. In the study group, the patients were informed visually. They watched a video record explaining and demonstrating the impacted tooth surgery. In the control group, this information was given verbally, in a standard way. After giving the information, the patients' anxiety was measured again and the surgery was completed as usual.

Results: Females had more anxiety than males ($p<0.001$). Age or education level did not correlate with the anxiety level ($p>0.05$). The anxiety level decreased in both study and control groups ($p<0.05$)

Conclusion: Informing the patient preoperatively either verbally or visually decrease the preoperative anxiety.

Keywords: anxiety, impacted third molar surgery

OP-044
How does orthognathic surgery affect the mentolabial groove from the frontal view?

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Objective: This study aims to determine how the mentolabial groove from the frontal aspect is affected by the movements of the mandible and to examine the effects of angular changes in the profile and depth in the frontal view following orthognathic surgery.

Materials-Methods: Sixty-two patients were enrolled in this study and divided into two groups (Group 1: Class II skeletal deformity, group 2: Class III skeletal deformity). Lateral and frontal photographs were taken before and six months after surgery in natural head position. Parameters were investigated; mentolabial groove length at the frontal view (MGLF), mentolabial groove angle at the frontal view (MGAF), and mentolabial groove angle at the lateral view (MGAL), mentolabial Groove Depth (MGDL).

Results: Out of 62 patients, 41 had Class III and 21 Class II skeletal deformities. The mean age was 25.2±5.7 years. In Group 1, the average ratio of MGLF was 0.59±0.14 for the preoperative and 0.45±0.09 for the postoperative period ($p=0.000$). In Group 2, the ratio of MGLF increased from 0.41±0.11 to 0.50±0.13 ($p=0.001$). There were significant differences in MGLF, MGAF, and MGDL between groups ($p<0.05$). There was a negative correlation between MGAL and MGLF ($p=0.001$, $r=-0.439$). MGDL correlated with MGLF ($p=0.00$, $r=0.499$).

Conclusion: Orthognathic surgery affects the mentolabial length in the frontal view. Class II patients' mentolabial groove lengths decreased, while class III patients increased following orthognathic surgery. In conclusion, orthognathic surgery should be planned carefully to obtain an aesthetic mentolabial groove in the lower face region.

Keywords: mentolabial groove, orthognathic surgery, frontal view

OP-045
Management of a Patient Exhibited Langerhans Cell Histiocytosis in the Maxilla and Mandible

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Objective: Langerhans cell histiocytosis is a histiocytic disease with a wide range of clinical manifestations and characterized by involvement of various organs. It is divided into three as eosinophilic granuloma, el-schuller christian diseases and letterer-siwe disease. The jawbones are involved in approximately 20% to 30% of all cases. Lesions are usually unilocular and multilocular, most commonly affecting the posterior mandible. Radiographic images are defined as "floating teeth" in advanced disease, while panoramic images are defined as aggressive osteolytic lesions.

Case: A 25-year-old male patient who had previously undergone biopsy in a clinic due to pain, swelling and mobility of the teeth in his lower jaw refered to our department. Intraoral and radiographic findings showed lytic lesions around the bilateral lower teeth of the mandible and the right side of the maxilla. At first, the administration of intralesional steroids into the lesions of both jaws was made. Three months later, due to the intensification of the symptoms, the patient underwent bilateral hemiresection of the mandible together with teeth extraction.

Conclusion: Management of patients with Langerhans cell histiocytosis is not clear. There are few treatment alternatives such as surgical curettage, radiation, steroid injections and chemotherapy. Solitary lesions are often treated with curettage and have shown low recurrence rates. In the case that we presented, curettage following intralesional steroid injection was successfully performed. After six months follow-up period, iliac bone reconstruction will be planned to rehabilitate the jaws.

Keywords: langerhans cell histiocytosis, intralesional steroid injection, curettage

OP-046
The Effect of Orthognathic Surgery on the Gull in Flight Appearance of the nose

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Objective: The aim of this study was to investigate how 'Gull in Flight' appearance and alar-columellar relationship change following Le Fort I surgery.

Materials & Methods: Forty patients who underwent Le Fort I osteotomy with or without mandibular osteotomy were included in this retrospective study. Pre (T1) and post-surgery (T2) measurements which were Angle of columella-alar triangle, Columella lobular angle, Alar rim angle, distances related to 'Gull in Flight' appearance and alar-columellar relationship were measured on computed tomography (CT) images.

Results: Of the 40 patients, 26 were female and 14 were male (mean age: 23.76±5.48 years). There was no significant difference between preoperative and postoperative values regarding columella-ala triangle, columella lobular angle, alar-columellar ratio ($p>0.05$). Pre and postoperative alar rim angle was significantly differed from each other ($p=0.011$). Distance of Gull in Flight appearance points to line passing from left and right canthus, which were y1, y2, y3, y4 and y5 were not significantly differed from preoperative values ($p>0.05$).

Conclusion: "Gull in Flight" appearance, which is one of the aesthetic parameters in nose was not changed following maxillary surgery

Keywords: Gull in Flight appearance, Le Fort I, alar-columellar relationship

OP-047
Reconstruction of Alveolar Cleft with Autogenous Iliac Bone Graft: A Case Series

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Objective: Secondary alveolar bone grafting is a surgical method that is used in the oral rehabilitation of patients with an alveolar cleft. In this case series, the treatment of alveolar clefts with cortico-cancellous bone graft harvested from the anterior superior iliac crest and complications after the surgery will be presented.

Case: Six patients (3 female, 3 male) with unilateral alveolar cleft were referred to Kocaeli University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery for performing orthognathic surgery. The mean age of the patients was 20.3 (17-28). All patients were operated under general anesthesia and alveolar clefts were reconstructed with cortico-cancellous grafts harvested from the anterior superior iliac crest. Four of the patients healed uneventfully. However, wound dehiscence and suppuration was occurred due to infection in the early postoperative period in a patient. In another patient, complete resorption of the cortico-cancellous graft with infection was observed after performing Le Fort 1 osteotomy in the late postoperative period.

Conclusion: Although secondary alveolar bone grafting with anterior superior iliac bone crest is a reliable technique to treat alveolar clefts, at the ideal timing for this procedure is between the ages of 6 and 10. Performing the surgery at ideal timing is essential not only for stabilizing maxillary segments and alar base, but also for providing a space for the lateral incisor and canine to erupt into the stable alveolar bone.

Keywords: alveolar cleft, anterior superior iliac crest, secondary alveolar bone grafting

OP-048
Evaluation Of Regenerative Effects Of High-Intensity Laser Therapy Following Crush Injury of The Sciatic Nerve In Rats

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Objective: In the present study, the effects of high-intensitylaser therapy (HILT) on peripheral nerve regeneration were investigated in a rat model of sciatic nerve crush injury.

Materials-Methods: The left scatic nerves of all rats were crushed with a surgical clamp for 30 s to create nerve damage. Following the nerve crush injuries of sciatic nerve,thirty-three rats were randomly divided into three groups as control, Low-level laser theraphy (LLLT), and HILT groups. The injured sciatic nerve of rats in the control group were left to heal spontaneously, whereas HILT (120J/session and wavelength 1024 nm) and LLLT (2.4J/session and 650 nm) were started immediately after surgery and performed once every 3 days during the postoperative period. Regeneration was investigated by sciatic functional index(SFI), electrophysiological evaluations and histomorphometric evaluations.

Results: At the end of 30 days healing period significanlty better SFI scores were noted in the HILT group compared with control group (p=0.025) whereas there was no statistically differences between the other groups. Electrophysiological evaluations revealed that HILT group has signficantly higher amplitude values than control group(p=0.014) however, there were no statistically differences between control-LLLT(p=1.000) and LLLT-HILT (p=0.084) groups.

Conclusion: According to functional, histomorphometric and electrophysiological investigations HILT revealed better results than LLLT on peripheral nerve regeneration after crush injury. HILT seems to be supperior than LLLT regarding to higher penetration depth and efficacy during peripheral nerve regeneration.

Keywords: HILT, LLLT, Sciatic Nerve Injury

OP-049
Does Menstrual Cycle Affect Morbidity Related to Orthognathic Surgery? Prospective Study

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Objective: Orthognathic surgery is performed to correct maxillomandibular deformities. Postoperative pain and edema caused by the inflammatory process significantly affect patient comfort. The aim of this study is the menstrual cycle may affect postoperative morbidity in female patients after orthognathic surgery.

Materials-Methods: This clinical study was planned as a single-center, controlled, prospective, double-blind,randomized. Twenty-four patients(18-35) with class III anomalies were included with regular menstrual cycles and divided into two groups(Group I follicular phase (n = 12),and Group II luteal phase (n = 12)).The pain assessment evaluated on VAS scales, and edema assessment was done by using a program called 3dMD Vultus software.

Results: The 9th-hour VAS mean values were significantly higher in group I compared to group II ($p<0.001$). The mean VAS values for the first 72hours and total (7days) were found to be significantly lower in luteal phase patients than in follicular phase patients ($p=0.033$). A statistically significant difference was found between the groups in terms of the mean values of postoperative edema on the 7th, 14th,and 21st days ($p<0.05$). Although an average of 370(350.0-485.0) cc of intraoperative bleeding was observed, there was no significant difference between the groups ($p=0.068$).

Conclusion: This is the first study to examine the effect of the menstrual cycle on postoperative morbidity in orthognathic surgery. According to the results of this study, it may be preferable to perform surgery in the luteal phase of the menstrual cycle in female patients who are planned for orthognathic surgery to reduce postoperative morbidity.

Keywords: Orthognathic surgery, menstrual cycle, postoperative morbidity

OP-050
Evaluation of the Effect of Video-Game Addiction on Stress Levels and Bruxism Habits in Young Individuals

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Objective: The aim of this study is to investigate the effect of video game addiction on psychological stress levels and day-and-night bruxism in young individuals aged between 12-20.

Materials-Methods: The study was planned to evaluate the perceived stress levels and the relationship between bruxism and video game addiction in young individuals between the ages of 12-20 through a questionnaire. A questionnaire consisting of three parts was directed to the volunteers. Questionnaire: It consists of a 20-question test measuring game addiction regarding the factors that will affect the subject, a test consisting of two parts and 12 questions, created by the American Sleep Health Academy and evaluating bruxism, and a Perceived Stress Scale (PSS) consisting of 10 questions which are based on the participants' own statements. Paired T test and Pearson Correlation test were used. The significance level was taken as $p<0.05$.

Results: Participants with game addiction had higher stress scores. There is a high positive correlation between bruxism and changes in PSS scores. The rate of daytime bruxism was found to be higher in participants with game addiction. The rate of nocturnal bruxism increased with the decrease of addiction by age.

Conclusion: Game addiction increases the incidence of bruxism and perceived stress scores. A strong relationship was observed between bruxism and perceived stress. Stress, which is increased by game addiction, can be shown as the cause of daytime bruxism that occurs at young ages.

Keywords: Bruxism, Daytime bruxism, Game addiction

OP-051
Does Vitamin C Level Affect Postoperative Analgesia in Patients Who Undergo Orthognathic Surgery

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Objective: The aims were to compare pre- and postoperative plasma levels of vitamin C in orthognathic surgery patients, and investigate relationships between vitamin C level and postoperative analgesia requirement in these patients.

Materials-Methods: The patients were 30 individuals who underwent orthognathic surgery. Arterial blood samples were drawn to measure pre- and postoperative plasma vitamin C levels. Postoperative pain was recorded as a visual analogue scale (VAS) score at 0, 2, 4, 8 and 16 hours post-surgery. Relationships between postoperative plasma vitamin C level and duration of surgery, postoperative analgesic consumption, and VAS scores, were analyzed.

Results: The difference between the patients' mean pre- and postoperative vitamin C levels was statistically significant (7.5±2.9 mg/L vs. 4.9±2 mg/L, respectively; p=0.001). Total duration of operation and anesthesia ranged from 110 to 356 minutes. There was no significant relationship between duration of operation and vitamin C level decrease. There was an inverse correlation between postoperative vitamin C level and amount of analgesic requested via patient-controlled analgesia (r=-0.699, p<0.001).

Conclusion:. The findings suggest that, in patients who undergo orthognathic surgery, i) plasma vitamin C levels decrease, and this is not associated with duration of operation; ii) low postoperative plasma vitamin C level is associated with greater postoperative analgesic consumption.

Keywords: Orthognathic Surgery, Postoperative Analgesia, Vitamin C

OP-052
The Assessment of External Nasal Valve Efficiency following Lefort I surgery

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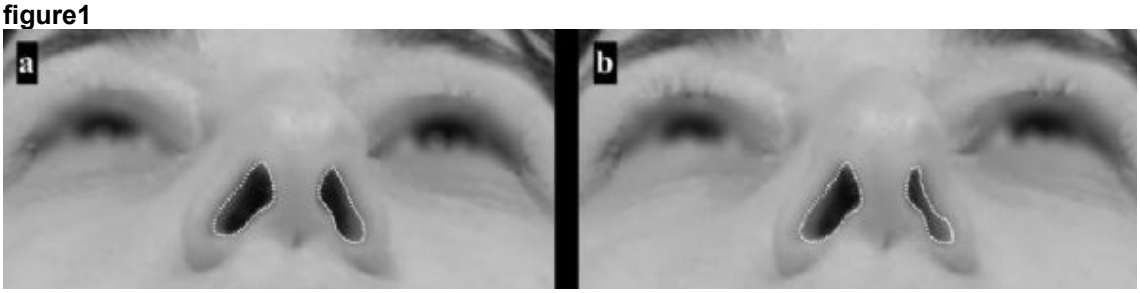
Department of Oral and Maxillofacial surgery, Faculty of Dentistry, İstanbul Medipol University, İstanbul, Turkey

The present study investigated how external nasal valve function is affected following Le Fort I osteotomy using External nasal valve efficiency index (ENVE). Twenty-one patients who underwent Le Fort I osteotomy with or without mandibular osteotomy were included. Pre and postoperative standardized videos of basal view of the nose during breathing were recorded, and two screenshots were taken, one in the resting position and the other after deep inspiration. ENVE was calculated at pre and postoperative periods for each patient. Of the twenty-one patients, twelve were female, and nine were male (mean age: 26.63±8.20 years). The mean ENVE index was 0.75± 0.16 for the preoperative period and 0.82±0.17 for the postoperative period. There was a significant difference between these values (p=0.002). When the correlation of the ENVE with maxillary movements was analyzed, the ENVE was negatively affected by maxillary impaction (p=0.011, r=-0.540). These findings imply that Le Fort I osteotomy positively affects the ENVE index. However; Due to the antagonistic relation between maxillary impaction and ENVE, higher maxillary impaction amounts or isolated maxillary impaction should be carefully planned in patients with low ENVE index.

Keywords: ENVE index, Le Fort I osteotomy, external nasal valve

figure1



patient' photo Screenshots showing the state at rest and in deep inspiration. a: preoperative resting state, b: preoperative deep inspiration

table1

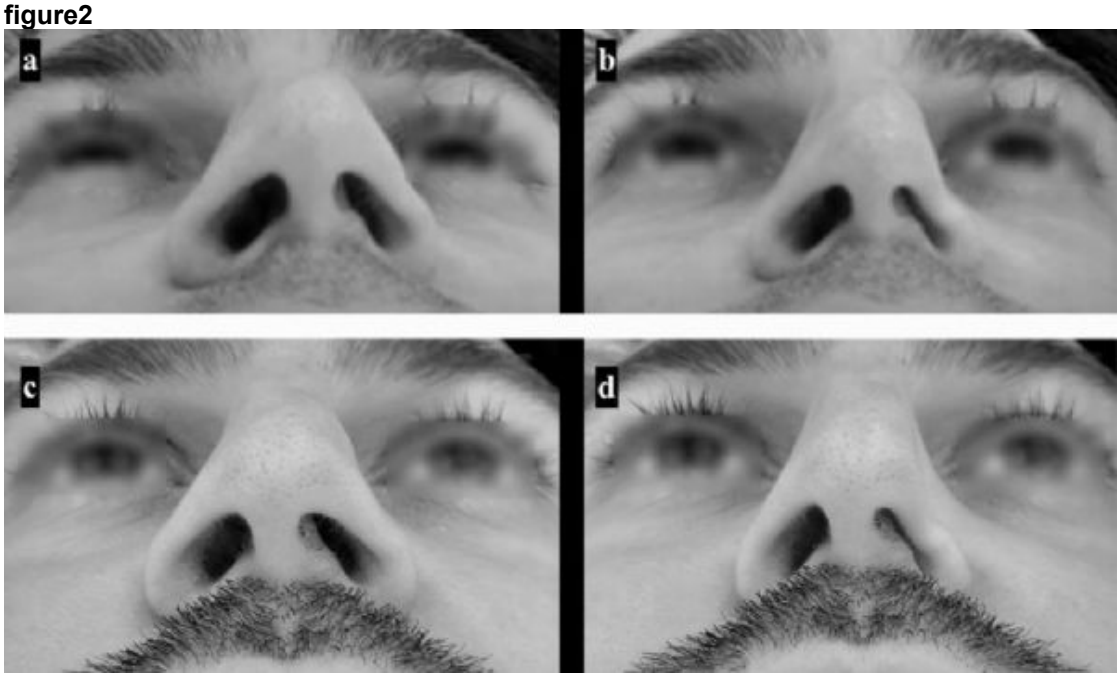
Table 1: Results of stepwise regression of the relationship of ENVE with maxillary advancement and impaction

Model		Adjusted R Square	Anova		Unstandardized coefficients		p
			F	p	Beta	Std Error	
ENVE	Constant	,255	7.82	0.011*	0.110	0.030	0,002
	Maxillary impaction amount				-0.032	0.11	0,011*

Abbreviations: External Nasal Valve Index
stepwise regression analysis
*statistically significant p<0.05

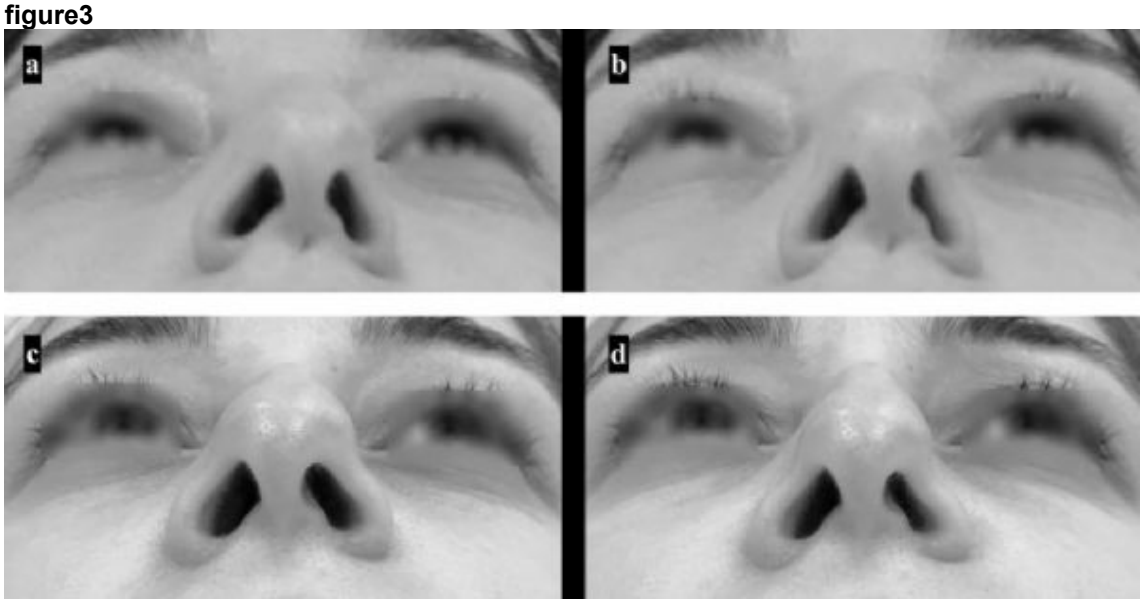
Results of stepwise regression of the relationship of ENVE with maxillary advancement and impaction

figure2



Patient with a considerable decrease in the ENVE index at postoperative period a: preoperative resting state, b: preoperative deep inspiration, c: postoperative resting state, d: postoperative deep inspiration.

figure3



Patient with a considerable increase in the ENVE index at postoperative period a: preoperative resting state, b: preoperative deep inspiration, c: postoperative resting state, d: postoperative deep inspiration.

OP-053
Management of severely resorbed jaws with anterior iliac graft: Case series report

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Objective: Advanced bone resorption can cause problems when the placement of dental implants is intended. Limited residual alveolar bone volume potentially results in aesthetic and functional compromise. Therefore, an adequate quantity and quality of bone can be considered a prerequisite for a successful oral rehabilitation with dental implants. Augmentation procedures allow the reestablishing of bone volume that is adequate for implant placement. Autogenous bone is believed to be the most effective grafting material. Autogenous grafts taken from the iliac crest provide huge advantage in large scale augmentations due to their corticocancellous content The aim of this presentation was to show how patients with severely resorbed jaws were successfully treated with iliac bone.

Case: Patients suffering from edentulous jaw and requested prosthetic rehabilitation admitted to our clinic. After intraoral and radiographic examination, severely atrophied bone resorption were observed and there was insufficient bone for the rehabilitation with fixed implant supported prostheses. Under general anesthesia, autogenous bone graft taken from the anterior iliac crest was obtained and applied to the patient jaw that was showing insufficiencies. After 4 months healing period, dental implants were inserted.

Conclusion: All patients were successfully augmented with anterior iliac crest and there was no complications and patients are now under follow up period. The use of corticocancellous bone grafts taken from the iliac crest in patients with vertical and horizontal bone insufficiency may be a reliable method to augment severely atrophied jaws.

Keywords: Bone Augmentation, Anterior İliac Graft, Autogenous Bone

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OP-054
'Surgery Only' Approach in Orthognathic Surgery: Case Series

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Objective: In orthognathic surgery, a new dental incompatibility and occlusion plane occurs between the jaws with the orthodontic treatment applied before the surgery. The plane of occlusion is a good reference for the surgeon in establishing the optimal position of the skeletal segments during orthognathic surgery. Although conventional procedure is still the primary approach in orthognathic surgery, treatment expectations change over time. Eliminating the need for orthodontic treatment before surgery and thus shortening the treatment time makes this approach attractive for patients as well.

Case: In this case series, 5 cases who applied to Süleyman Demirel University Oral and Maxillofacial Surgery Clinic with the complaint of dentofacial deformity and underwent Le Fort I osteotomy and bilateral sagittal split osteotomy with a "surgery only" approach will be presented.

Conclusion: The "surgery only" approach in orthognathic surgery is a method that has become popular in recent years. It can be said that the "surgery only" approach, which can be applied in appropriate cases and within the correct indications, is a treatment method demanded by patients because it shortens the treatment time and provides the patient's aesthetic expectations faster than conventional treatment.

Keywords: Orthognathic surgery, Surgery only approach

OP-055
Removing A Shrapnel Piece From The Subcondylar Region With The Retromandibular Transparotid Approach: A Case Report

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Objective: Recommended approaches for accessing the condylar and pericondylar regions include, preauricular, postauricular, endoscopic, endaural, retromandibular and submandibular approaches. In this study, the removal of the metallic part in the mandibular subcondylar region as a result of a gunshot injury using the retromandibular transparotid approach will be explained.

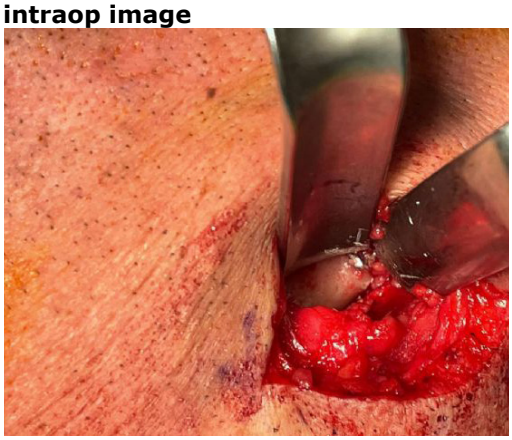
Case: A-46-year-old patient applied to our clinic with the complaint of pain in the subcondylar region of the mandible.In the patient's anamnesis, it was learned that he had a gunshot wound to the mandible years ago.As a result of the clinical and radiographic examination of the patient, a radiopaque foreign substance was detected in the relevant region. It was decided to remove the object in the region with the retromandibular transparotid approach. The patient was planned to remove the object under general anesthesia. After passing the cutaneous, subcutaneous and parotid capsule, Facial nerve branches were identified with a nerve stimulator and blunt dissection was performed with a curved hemostat on both sides of the nerve pathway to access the masseter muscle. The area related with the subperiosteal dissection was reached using the periosteum elevator. Metallic substance was removed.The parotid capsule and subcutaneous tissues are absorbable, skin tissue monofilament non-absorbable closed with sutures.

Conclusion: The retromandibular transparotid approach has significant advantages in accessing the subcondylar and ramus regions. Complications of the retromandibular transparotid approach include salivary gland fistula, Frey's syndrome, limitation and pain in temporomandibular (TMJ) movements, hypoesthesia in the ear, and facial nerve damage. These complications did not occur in our patient. The follow-up of the patient continues.

Keywords: Retromandibular transparotid approach, Trauma

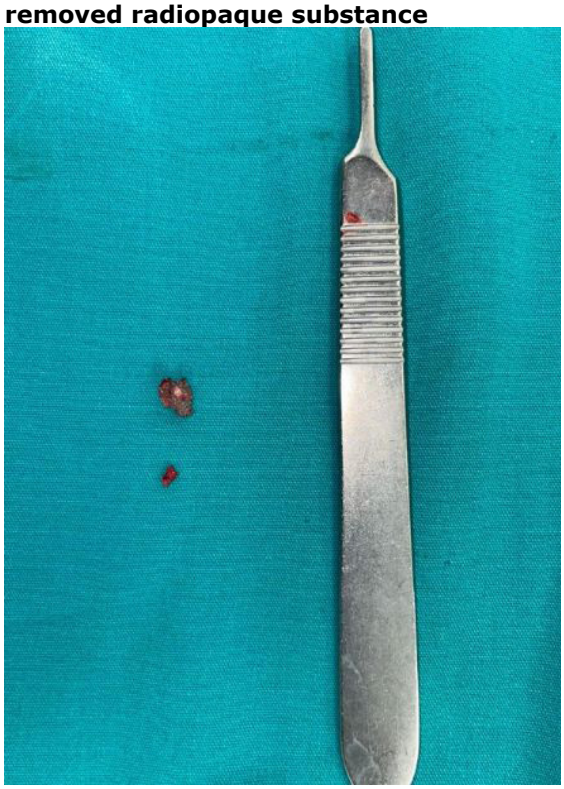
3D IMAGE

intraop image



pre-op tomography image

removed radiopaque substance



OP-056
Surgery-First Approach in Orthognathic Surgery: Case Series

Timuçin Baykul[1], Yavuz Fındık[1], Tayfun Yazıcı[1], Cihan Varol[1], Şükrü Buğra Kara[1], Muhammed Hilmi Büyükçavuş[2]

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Objective: Today, orthognathic surgery operations have become safely and frequently performed surgical procedures. Decompensation treatment performed before surgery prolongs the total treatment time, and the benefit/harm ratio of decompensation is seriously questioned at this point. On the other hand, the surgical approach, which has a very limited indication, significantly shortens the total treatment time in suitable patients, and increases patient comfort and patient satisfaction significantly. For these reasons, the surgical approach first is being accepted more and more in the field of orthodontics.

Case: In this case series, 11 cases who applied to Süleyman Demirel University Faculty of Dentistry Oral and Maxillofacial Surgery Clinic in 2021 with the complaint of dentofacial deformity and underwent orthognathic surgery with the "surgery first" approach will be presented. The patients were followed up in the post-operative period, and no complications were encountered in this process.

Conclusion: In traditional orthognathic surgical treatments, preoperative orthodontic treatment usually takes longer, but after surgery the quality of life is also seriously deteriorated. In the "surgery first" approach, it has become a popular treatment method in recent years, since treatment times are shortened and patient comfort has increased significantly.

Keywords: Orthognathic surgery, Surgery first approach

OP-057
Orthognatic Surgery After Maxillary Distraction Osteogenesis: A Case Report

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Objective: Distraction osteogenesis describes the formation of new bone created by the gradual separation of two bone surfaces after an osteotomy. Before dental and skeletal treatments, many surgical procedures have been defined and applied to bring the maxilla and mandible to the desired position. Distraction osteogenesis promotes soft tissue growth along with 3D bone gain and may eliminate the need for bone grafting to correct large malformations.

Case: In this case report, a 23-year-old male patient with class 3 bite, 12.5 mm negative overjet, who applied to Süleyman Demirel University Oral and Maxillofacial Surgery Clinic with the complaint of dentofacial deformity, had maxillary distraction osteogenesis and subsequent orthognathic surgery (Le Fort I + BSSO) treatment will be explained.

Conclusion: In the treatment of dentofacial deformities, distraction osteogenesis is a treatment approach that has been used safely for many years. Distraction osteogenesis with correct indication and planning eliminated the need for bone grafting in this case, and stands out as an advantageous approach because it increased the amount of soft tissue along with the bone. In cases with large defects, distraction osteogenesis and orthognathic surgeries can be applied together.

Keywords: Distraction osteogenesis, Orthognathic surgery, Dentofacial deformity

OP-058
The Role of Botulinum Toxin Type-A Injection in The Phased Approach of The Management of Temporomandibular Disorders and Myofascial Pain: A Systematic Review

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Objective: Temporomandibular disorders (TMDs) term consists of the clinical complaints affecting the temporomandibular joint (TMJ), masticatory muscles, and related musculoskeletal structures. Despite the lack of consensus on the management of TMDs, a phased approach from conservative treatment to invasive surgical interventions is chosen mostly. Botulinum toxin type A (BTX-A) injection, one of the minimally invasive treatments, is also widely used in the treatment of TMD. This study aims to assess the clinical situations in which BTX-A injection therapy is preferred and to evaluate its place in the phased treatment approach.

Materials-Methods: A comprehensive search was performed in PubMed, Scopus, and Web of Science databases to find relevant studies from 2012 to February 2022 in accordance with the PRISMA statement.

Results: A total of twenty-five studies that met the eligibility criteria were included. Eleven of these studies were investigated the effect of BTX-A treatment on myofascial pain without internal derangement of TMJ. In studies that performed conservative treatment before BTX-A injection, the observation period was ranged from 4 weeks to 6 months. The most preferred injection technique was a 5-point injection for masseter muscle and a 3-point injection for temporalis muscle.

Conclusion: According to the results of this study, especially in cases with severe chronic myofascial pain accompanied by bruxism, BTX-A injection therapy can be considered the first step before conservative treatment, which includes the use of systemic drugs.

Keywords: Botulinum Toxin, Myofascial Pain, Temporomandibular Disorders

OP-059
Evaluation Of Crestal Bone Level Around Dental Implants Placed In Intraoral Autogenous Bone Block Graft

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Objective: The aim of this study was to evaluate the crestal bone level around dental implants placed in autogenous bone block graft using cone-beam computerized tomography (CBCT).

Material-Methods: Patients who needed alveolar bone augmentation before dental implant surgery were included. The autogenous bone block graft harvested from ramus, symphysis and tuber were used. Patients' age, gender, reasons of tooth loss, donor site, recipient site, number and localisation of dental implants, intraoperative and postoperative complications, and follow-up period were recorded. The crestal bone level around dental implants were measured using CBCT.

Results: Sixteen patients who underwent onlay bone augmentation were evaluated retrospectively. The mean age was 44.12 years. The mean follow-up period was 2.68 years. The mandibular ramus was the most common donor site (55.6%), followed by symphysis (33.3%) and tuber maxilla (11.1%), respectively. In 62.5% of patients, only lateral, in 18.75% of them, only vertical, and in 18.75% of them, both vertical and lateral bone augmentation were performed. The amount of crestal bone resorption was more than 1.5 mm in 3 patients treated with only lateral bone augmentation in a mean of 2 years follow-up. The same resorption rate occurred in 2 patients treated with both lateral and vertical bone augmentation in a mean of 3.3 years.

Conclusion: The onlay bone augmentation using intraoral autogenous bone graft is reliable and acceptable surgical option before dental implant placement. Wound dehiscence, tuber graft and vertical onlay augmentation are risk factors to maintain crestal bone level around dental implants in follow-up.

Keywords: Autogenous Graft, Crestal Bone Resorption, Onlay Bone Augmentation

OP-060
Comparison of conservative therapy and arthrocentesis for treatment of symptomatic temporomandibular joint disc diplacement without reduction

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Objective: Disc displacement without reduction (DDwoR) in temporomandibular joint results with pain and limited mouth opening. Non-invasive interventions are primarily recommended for treatment of DDwoR. The aim of this study is to compare the clinical outcomes of conservative treatment and arthrocentesis in patients with DDwoR.

Materials-Methods: 54 patients with DDwoR treated with non-invasive intervention or arthrocentesis were evaluated. Maximum mouth opening (MMO) and pain (Visual Analogue Scale [VAS]) at baseline, 2 weeks and 1 month after treatment were compared for both treatment groups.

Results: 22 patients (16 female and 6 male) were treated with arthrocentesis and 32 patients (27 female and 5 male) were treated with non invasive interventions. In the non-invasive group baseline MMO and VAS values were 28.8 ±3.6 and 69.2±11.3, respectively. In arthrocentesis group baseline MMO and VAS values were 27.2 ± 6.2 and 72.6 ±8.5 respectively. Baseline VAS and MMO values of both treatment groups were similar ($p>.05$). Regarding VAS and MMO, the intragroup analyses showed a statistically significant reduction in both groups compared with baseline values ($p < 0.05$). MMO values were significantly higher in arthrocentesis group in second week ($p=.02$). Although, there were no significant difference between treatment groups regarding VAS values on 2. week, patients treated with arthrocentesis scored lower VAS values on 1. month ($p=.045$)

Conclusion: It can be concluded that both treatment methods are beneficial in treatment of DDwoR. However arthrocentesis reduced functional impairment more rapidly.

Keywords: Arthrocentesis, disc displacement without reduction, conservative treatment

OP-061
Histopathological Comparison of Type-I Atelocollagen Sponges and Xenogen Grafts In Terms of New Bone Formation In Sinus Floor Elevations

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[1]*Baskent University, Oral and Maxillofacial Surgery Department, Ankara, Turkey*
[2]*Baskent University, Pathology Department, Ankara, Turkey*

Objective: In this study, it was aimed to compare the atelocollagen sponges which are thought to be used in maxillary sinus floor elevation with xenogen graft particles, histopathologically and histomorphometrically in terms of new bone formation.

Materials-Methods: In 16 New Zealand white rabbits, bilateral sinus floor elevation was performed, the cavities under the sinus membrane were augmented by placing an atelocollagen sponge on the right side and an equal volume of xenogen grafts on the left side. The rabbits were sacrificed at the end of 4th and 8th weeks. The obtained samples were divided into 4 groups and evaluated histopathologically and histomorphometrically.

Results: Histopathological evaluation revealed that the two materials were biocompatible materials, formed a suitable environment for the transfer of osteogenic cells. Histomorphometric evaluations showed that there was no difference between the materials in terms of percentage of new bone formation. However, the newly formed bone area and osteoid area were found to be much larger in the areas where xenogen grafts were used. Atelocollagen sponge was unable to maintain its volume during the test period, resorbed and the augmented region collapsed.

Conclusion: The xenogen graft showed superior volumetric stability and maintained its volume, acting as a framework for the newly formed bone. While the atelocollagen sponge was completely resorbed, a very low tendency to resorption was observed in the xenogen graft. When the newly formed bone and osteoid areas were examined,it was seen that the xenogen graft created much more new bone and osteoid areas than the atecollagen sponge.

Keywords: Atelocollagen sponge, Sinus floor elevation, Xenograft

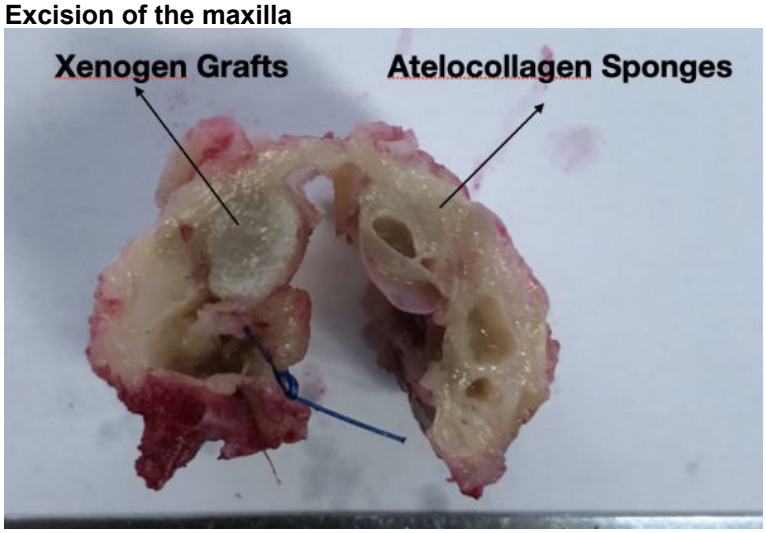
Atelocollagen Sponge Group Measurment

Atelocollagen Sponge Group		N	Average	Standard Deviation	p
Bone Marrow Volume	BM/TV (1)	8	2,01	1,53	0,097
	BM/TV (2)	8	3,63	1,64	
Vascular Proliferation	1.	8	14,75	5,26	0,004*
	2.	8	6,88	1,81	
New Bone	B. Ar (1)	8	284496	94817	0,091
	B.Ar (2)	8	280446	146950	
	Os. Ar (1)	8	61956,3	24614,8	0,020*
	Os. Ar (2)	8	114458,2	58861,1	
	BV/TV (1)	8	27,03	9,93	0,015*
	BV/TV (2)	8	39,48	9,55	
Soft Tissue Volume	STV/TV(1)	8	72,97	9,93	0,015*
	STV//TV(2)	8	60,52	9,55	

When the change between the first and second measurements in the atelocollagen sponge group was examined; vascular proliferation, new bone BV/TV, new bone Os. Ar., for soft tissue STV/TV parameters, there was a significant difference between the first and

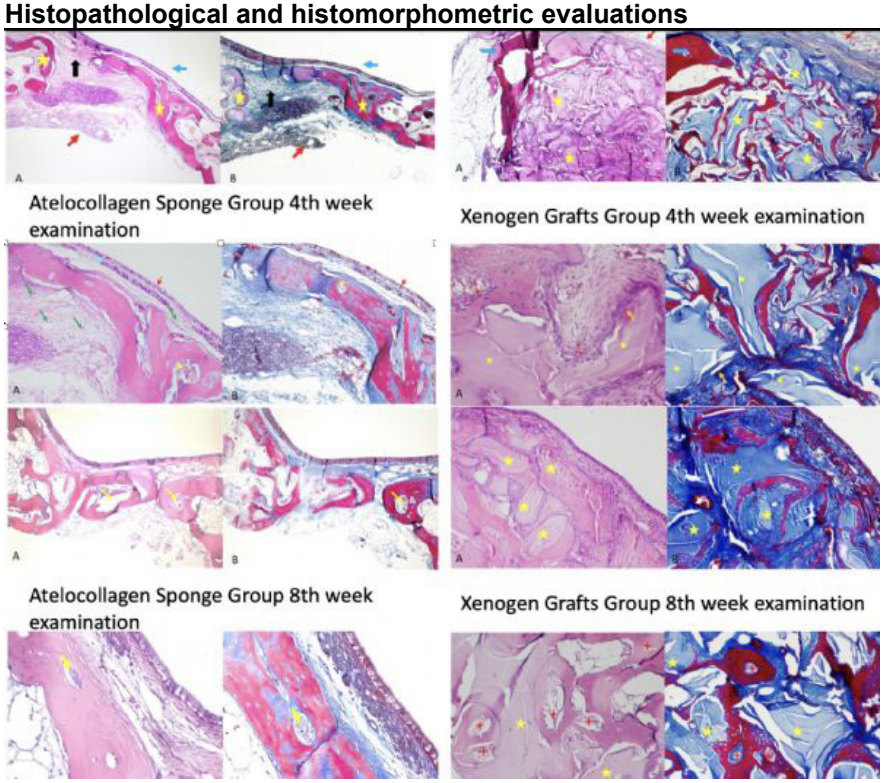
second measurements (p<0.05). While a significant decrease was observed in the second measurement for vascular proliferation and soft tissue parameters compared to the first measurement.

Excision of the maxilla



After removing the surrounding soft tissues, the maxilla of the sacrified subjects were excised under the orbital floor with appropriate discs and burs. The samples obtained were fixed in 10% formaldehyde solution for histopathological examination by labeling them with group names.

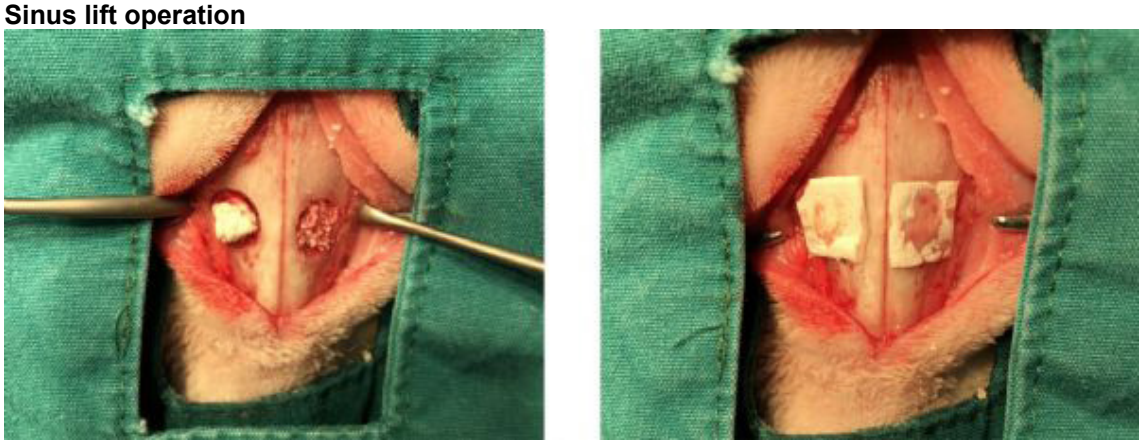
Histopathological and histomorphometric evaluations



Sections taken from the obtained samples were classified according to groups and evaluated

histopathologically and histomorphometrically in terms of presence of acute or chronic inflammation, formation of new vascular structures, new bone formation, residual graft particles, formation of bone marrow spaces, and connective tissue formation.

Sinus lift operation



Atecollagen sponge was placed in the space created in the right maxillary sinuses of all rabbits, and xenogen graft particles were placed in the space created in the left maxillary sinuses. The opened bone windows are covered with a resorbable membrane.

Xenogen Graft Group Measurment

Xenogen Graft Group		N	Average	Standard Deviation	p
Bone Marrow Volume(%)	BM/TV (1)	8	0,71	0,75	0,035*
	BM/TV (2)	8	1,49	0,46	
Vascular Proliferation	1.	8	13,38	2,56	0,000*
	2.	8	6,50	1,60	
New Bone	B. Ar (1)	8	577287	193011	0,027*
	B. Ar (2)	8	791391	257161	
	Os. Ar (1)	8	256953	102380	0,009*
	Os. Ar (2)	8	524009	286233	
	BV/TV (1)	8	22,98	6,50	0,002*
	BV/TV (2)	8	41,38	9,47	
Residual Graft	GV/TV (1)	8	34,79	11,80	0,246
	GV/TV (2)	8	30,19	8,46	
Soft Tissue Volume	STV/TV (1)	8	42,23	13,60	0,019*
	STV/TV (2)	8	28,42	15,67	

When the change between the first and second measurements in the xenogen graft group was examined; bone marrow BM/TV, vascular profiling, new bone B. Ar., new bone Os. Ar., for new bone BV/TV, soft tissue STV/TV parameters, there was a significant difference between the first and second measurements. Bone marrow CI/TV, new bone B. Ar., new bone Os. Ar., for new bone BV/TV measurements, a significant increase was observed from the first measurement to the second measurement, while a significant decrease was observed in vascular profiling and soft tissue STV/TV measurements.

OP-062
The effects of temporomandibular joint arthrocentesis combined with platelet-rich fibrin injection on postoperative pain and maximum mouth opening

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Objective: We aimed to evaluate the effects of arthrocentesis combined with injectable platelet-rich fibrin (i-PRF) on postoperative pain and maximum mouth opening (MMO) in this retrospective study.

Materials-Methods: The files of 65 patients with internal temporomandibular joint disorders (TMD) who underwent arthrocentesis alone and arthrocentesis combined with i-PRF between September 2018 and December 2021 were reviewed retrospectively. It was observed that arthrocentesis was applied to 35 patients (Group 1), and arthrocentesis combined with i-PRF was applied to 30 patients (Group 2). In all patients, arthrocentesis was performed under local anesthesia and the upper joint space was lavaged with an average of 100 ml of Ringer's Lactate solution. In patients included in Group 2, 2 ml of i-PRF was injected immediately after arthrocentesis. Pain and maximum mouth opening values obtained from all patients before the procedure, at the 1st week, 1st month and 3rd month after the procedure were statistically compared. Evaluation of the data was carried out using the SPSS 23.0 program.

Results: A statistically significant difference was found between the two groups in terms of MMO, pre-procedure and 1st week measurement, pre-procedure and 1st month measurement, pre-procedure and 3rd month measurement ($p<0.05$). MMO values in Group 2 were higher than Group 1. There was no statistically significant difference between the two groups in terms of pain ($p>0.05$).

Conclusion: The results of our study showed that arthrocentesis combined with i-PRF was more successful than arthrocentesis alone in terms of MMO in TMD patients.

Keywords: arthrocentesis, platelet-rich fibrin, temporomandibular joint disorders

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OP-063
Effects of granisetron versus granisetron and metoclopramide on postoperative nausea and vomiting following orthognathic surgery: a prospective double blind randomized clinical study

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Objective: Postoperative nausea and vomiting (PONV) remains one of the most common problems after general anesthesia and frequently occurs following orthognathic surgery. The aim of this study was to evaluate the effects of granisetron alone and in combination with metoclopramide on PONV incidence.

Materials-Methods: After institutional ethic committee approval, 60 consecutive patients aged between 17 and 53 years undergoing orthognathic surgery were randomly divided into granisetron (G) and granisetron+metoclopramide (GM) groups. PONV was evaluated in recovery room when the patients were fully awake and on the 1st, 2nd, 4th, 6th and 24th hours postoperatively by using Simplified Postoperative Nausea and Vomiting Impact Scale. The intensity of PONV was also rated by the patient on a visual rating scale (VRS) on a 10 mm scale. If the patient had nausea and its VRS intensity was >= 4, ondansetron 4mg IV was infused as a rescue antiemetic.

Results: 73% of patients in group G and 53% of patients in group GM experienced nausea and 63% of patients in group G and 30 % of patients in group GM experienced vomiting postoperatively (p:0,01 and p:0,03 respectively). Postoperative rescue ondansetron need was significantly higher in group G when compared to group GM (70% vs 30%, p:0.002) The simplified PONV score was significantly lower in group GM at 1st, 2nd,4th, 6th and 8th hours postoperatively.

Conclusion: Our study findings confirm the high incidence of PONV among patients undergoing orthognathic surgery. Combination of granisetron and metoclopramide seems to be promising in reducing PONV incidence when compared to granisetron alone.

Keywords: granisetron and metoclopramide, nausea and vomiting, orthognathic surgery

OP-064
Does Inferior Sclera Show Changes With Clockwise or Counterclockwise Rotation of Maxilla?

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Objective: To evaluate the effect of scleral show in patients who underwent clockwise or counterclockwise rotation with maxillary impaction and advancement of the maxilla.

Materials-Methods: The study included 43 patients with dentofacial deformities who had three-dimensional orthognathic surgery planning between 2019 and 2022. Patients were divided into 2 groups according to maxillary rotation. In group I, counterclockwise rotation with advancement of the maxilla (n=24) and in group II, clockwise rotation with advancement of the maxilla (n=19). Preoperative and postoperative 6th month photographs were taken in the natural head position. Photographs were standardized in Microsoft PowerPoint, and changes in the inferior sclera were evaluated using Image-J software. The distance between the center of the pupil and the lower eyelid was measured, and the pixel area under the limbus was recorded. The correlation between inferior scleral show and maxillary rotation was evaluated.

Results: The mean maxillary advancement amount was 4.37±3.52mm in GroupI and 5.63±2.33mm in GroupII. In GroupI, the maxillary occlusal plane angle decreased from 100.41±5.40 to 96.45±4.41 and in GroupII, the maxillary occlusal plane angle increased from 92,61±12,53 to 95,89±12,64. Statistical analysis revealed no significant results for scleral show bilaterally in GroupI($p<0.05$). In groupII, it was found that the maxillary clockwise movement decreased the scleral appearance on both sides, and this difference was statistically significant in group II($p=0.03$).

Conclusion: Clockwise maxillary rotation may have a positive effect on the sclera. In cases where scleral show is increased, clockwise rotation can be incorporated into planning in addition to maxillary advancement by considering other midface esthetic parameters.

Keywords: Scleral show, clockwise rotation, counterclockwise rotation

OP-066
Assessment of The Relation Between Maxillary or Mandibular Cant and Lip Cant In Bimaxillary Orthognathic Surgery Patients

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Objective: One of the most desired esthetic outcomes of orthognathic surgery is correction of the lip cant in coronal plane. Orthognathic surgery provides significant corrections in all planes in bone tissue, but reflections of these bone corrections to adjacent soft tissues remains controversial. The present study is designed to reveal whether maxillary or mandibular cant correction via roll rotation is more effective for improving the lip cant.

Materials-Methods: The analyses were performed using cone beam computed tomographic radiographs of the patients who underwent bimaxillary orthognathic surgery by LeFort 1 and sagittal split osteotomies. The radiographs were taken pre- and 6-12 months postoperatively. 3-D Slicer version 4.11.20210226 software was used for linear measurements. Statistical analyses were performed using Spearman's Rank Correlation Coefficient Test and P values less than 0.05 were accepted as significant.

Results: A significant correlation was found between the cant angles of mandibula and lip. Statistically there is no significant relation between the cant angles of maxilla and lip.

Conclusion: Correction of cant angle of mandibula is more crucial than that of maxilla to achieve optimal symmetry of lip in coronal plane.

Keywords: mandibular cant, lip cant, roll rotation

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OP-067
Infections with Aspergillus and Mucor in the Maxillofacial Region

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Objective: Aspergillus and Mucor spp. are ubiquitous, filamentous moulds and opportunistic pathogens. In the maxillofacial region they can cause local(non-invasive) or invasive mycosis. Fungal spores penetrate through soft tissue lesions or are inhaled and grow to fungal balls in the paranasal sinuses.

Materials-Methods: Retrospective evaluation of 52 patients with aspergillus or mucor infections treated in our university hospital. Localization, risk-factors, recurrences, diagnostic and treatment methods, complications and sequelae were analyzed.

Results: The mean age was 55 (5–88)with an even gender distribution. 40 patients had an infection with Aspergillus, 6 with Mucor and 2 suffered from a co-infection with Aspergillus and Mucor. 4 showed an infection with a filamentous mould that diagnostically could not clearly be distinguished between Aspergillus or Mucor.
Most commonly the paranasal sinuses were affected for both aspergillus and mucor infections. But there were also invasive manifestations in the upper and lower jaw, oral mucosa, soft-tissue of the face, orbita and abscess formations. 10% developed a cerebral or pulmonary spread or sepsis. Three patients died. In most but not in all cases these severe forms of infection occurred in immunocompromised patients. There were associations with over-pressed root-filling materials, dental implants, osteosynthesis plates, MRONJ, oroantral fistula and orbital exenteration. 20% were treated because of a recurrence.

Conclusion: The treatment of these fungal infections -especially in immunocompromised patients– remains challenging. Fungal balls bother with sinusitis symptoms and recurrent surgical interventions in case of relapse. Invasive mycosis lead to severe functional and aesthetical disabilities, spread into other body-regions and be fatal.

Keywords: Aspergillus and Mucor, mycosis, fungal infection of the head and neck

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OP-068
New Therapeutic Drug Approaches to Treat Fungal Infections in the Head and Neck Region

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Objective: Fungal pathogens like Aspergillus, Mucor or Candida spp. can cause local or invasive infections in the head and neck region, latter often difficult to treat. Candida is also presumed to play a cariogenic role. The mortality rate of invasive mycosis is still high with 40-60%. The treatment is surgical and/or pharmacological. The variety of antifungal drugs for local or systemic use is limited. Because of organ-toxicities a drug-monitoring is often required. Alarming is also the increasing resistances. Antiseptics also play a role in therapy and prevention. But a local application can have a toxic effect on endogenous tissue and cause necrosis. Therefore their use in closed anatomical cavities (i.e. abscess cavity, paranasal sinuses) is not permitted.

Materials-Methods: In a laboratory research setting we studied host- and fungus-derived factors that negatively affect the growth of the human pathogenic moulds and yeasts and are testing their properties for local application to treat fungal infections in the oral cavity or paranasal sinuses using 3D-human-mucosa-models.

Results: Using different experimental approaches we found and isolated an antifungal organic substance normally bound to serum albumin.
In another independent project we found soluble factors that are secreted by non-human pathogenic moulds and inhibits the human-pathogenic *Aspergillus fumigatus*. All examined antifungal substances showed no toxicity in standard cell culture.

Conclusion: This study deals with the identification and characterization of novel antifungal substances and their potential use in local therapy of mucosal infections and their prevention.

Keywords: antifungal drugs, head and neck infections, local pharmaceuticals

OP-069
Evaluation of Temporomandibular Joint Internal Derangement and Condyle Morphology in Patients with Bruxism

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Objective: Temporomandibular disorder (TMD) is a term used for a variety of clinical problems affecting the masticatory system, temporomandibular joint, and related structures with multifactorial etiology. Bruxism is an oral parafunctional habit that has an important role in its etiology. This study aimed to compare the pain scale values, internal derangement, and condyle morphology parameters in patients with bruxism and without bruxism.

Materials-Methods: A total of 60 patients (120 TMJs), 30 of whom had bruxism as study group and 30 of whom had not bruxism as control were included in the study. Bruxism signs were diagnosed clinically and were acquired during a clinical examination. The pain was evaluated using a visual analog scale (VAS). Internal derangements and condyle morphology were examined on magnetic resonance imaging (MRI).

Results: The rate of disc displacement without reduction was 53.3% of 60 TMJs in the study group, while it was 13.3% of 60 TMJs in the control group. A statistically significant difference was observed in terms of pain degree, the severity of internal derangement between bruxism and control groups ($p<0.05$).

Conclusion: Internal derangements and degenerative changes may accompany myofascial pain in patients with bruxism. Bruxing behavior may cause an increase in the severity of internal derangement with the effect of trauma on TMJ. In patients with myofascial pain due to bruxism, a comprehensive evaluation should be performed with changes in the masticatory system and temporomandibular joint structures.

Keywords: Internal derangement, bruxism, temporomandibular joint

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OP-070
Design and Additive Manufacturing Processes of Oral MAXF Patient-specific Reconstructive Surgery

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The patient-specific implants are developed especially for exceptional cases where the standard implant solutions are insufficient. There are many steps to obtain an accurate patient-specific implant, and it requires expertise in medical and engineering sciences and validated process elements. The development process of the patient-specific implants begins with data acquisition. Radiological image source formats are usually CT or CBCT for the oral and maxillofacial area. Then, these 2D images are reconstructed as precise 3D models via medical image processing. 3D digital models can be converted to physical models via 3D printing to plan the surgery at this point. The implant design and fabrication practice consist of 3D modeling, analysis, and additive manufacturing (AM). Medically certified software, materials, and machines must be utilized for all stages. The implant is 3D modeled as a result of engineer-physician collaboration. It is aimed to design and produce implants fully adaptable to the irregular bone structure of the region, topologically optimized-reduced weight, and cost according to structural analysis results. The material and AM methods are chosen according to the needs of mechanical and biological performances and producibility. This article explains the development process of additively manufactured subperiosteal jaw implants, and the clinical results are demonstrated.

Keywords: implant, maxillofacial, reconstruction

OP-072
Experimental comparison of different fixation techniques for stabilization of the maxilla after Le Fort-I osteotomy

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Objective: In this study, we aimed to evaluate the effects of different titanium fixation methods on the stability of the maxilla after Le Fort-I (LF-I) osteotomy.

Materials-Methods: We compared the stability of four different titanium fixation systems after LF-I osteotomy in polyurethane models. Twenty-four models were divided into 4 groups. In the first group, we adapted standard 4-hole, L-shaped titanium mini-plates 1mm thick with 2.0mm screws and placed them bilaterally on the zygomatic buttress and piriform rim. In the second group, we placed the same mini-plating system bilaterally on only the aperture piriform region. In the third group, we used 4-hole, L-shaped titanium micro-plates 0.6mm thick with 1,6mm screws and placed them bilaterally on both sides. In the last group, we used a total of 4-screws 11mm in length with 2mm diameter and placed them bilaterally on the zygomatic buttress and piriform rim. Each group was tested in the anteroposterior directions with a servo-hydraulic testing unit.

Results: The displacement values were not significantly different up to 55N ($p>0.05$) but were better between 55N and 90N in the standard 4-mini-plate group and the standard 2-mini-plate group ($p<0.05$).

Conclusion: The present experimental study demonstrated that the 4-mini-plates and 2-miniplates fixation systems had greater resistance to anteroposterior loads than 4-micro-plates and 4-screws fixation systems in models advanced 5mm. In addition, the 4-screws fixation system was found to be as resistant to loads as the 4-micro-plates fixation system.

Keywords: le fort-I osteotomy, orthognathic surgery, skeletal stability

OP-073
Evaluation of the Effects of Royal Jelly on Experimentally Created Bisphosphonate Related Osteonecrosis of the Jaw

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Objective: To evaluate the effectiveness of royal jelly in the prevention of experimentally created bisphosphonate related osteonecrosis of the jaw (BRONJ).

Materials-Methods: 60 adult female rats were randomly divided into 5 groups. Tooth extraction was performed on the animals in the first group. In the second group, tooth extraction was performed after bisphosphonate administration. After the administration of royal jelly, tooth extraction was performed the third group. In the fourth group, bisphosphonate was given first, then tooth extraction was performed, and finally, royal jelly was administered. Bisphosphonate and royal jelly were given first to the fifth group, followed by tooth extraction. As a bisphosphonate, zoledronic acid (0,1 mg/kg) was given intraperitoneally once every three days for two months. Every day for three weeks, 100 mg/kg royal jelly was given by oral gavage. Experimental animals were sacrificed for further clinical, radiological, and histomorphometric analyses. The data were analyzed statistically.

Results: The soft tissue healing of the extraction socket was shown to be clinically better in the groups treated with royal jelly and the control group than in the group given only bisphosphonate. According to the micro-CT results, bone mineral density was found to be higher in the groups given royal jelly compared to the other groups ($p<0.05$). According to histomorphometric analysis, it was determined that the IL-1β level of the second group was higher than that of the fifth group ($p<0.05$).

Conclusion: In conclusion, royal jelly has positive effects in the prevention of BRONJ.

Keywords: Bisphosphonate, Osteonecrosis, Royal Jelly

Histomorphometric Evaluation

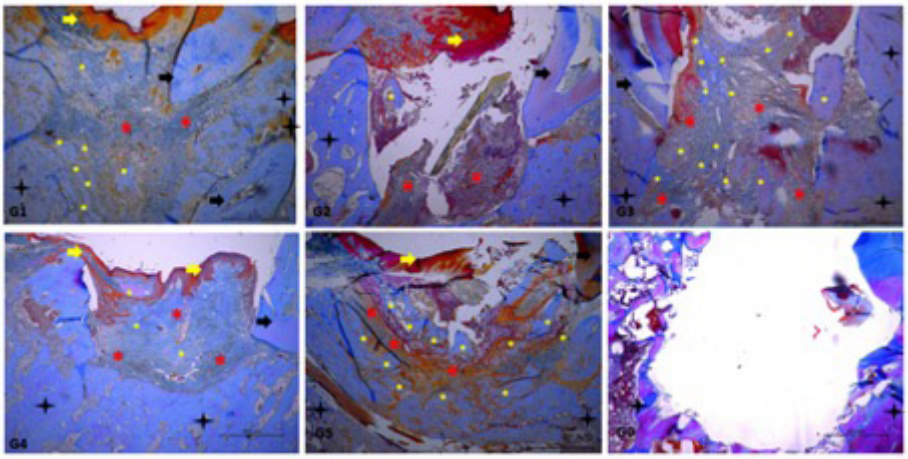

Figure 1.Histological sections showing the healing process of the alveolar socket after tooth extraction in rats belonging to the experimental groups. G1:Control Group,G2: Zoledronic acid (intraperitoneal)+Tooth extraction, G3:Royal jelly given by oral gavage+tooth extraction,G4:Zoledronic acid(intraperitoneal)+tooth extraction+royal jelly given by oral gavage,G5:Zoledronic acid(intraperitoneal)+royal jelly given by oral gavage+tooth extraction. The appearance of the areas filled by new bone tissue within the mature connective tissue covering the socket cavity with completed reepithelialization in the extraction sockets of the control group (G1).Similar to the control group, the presence of new bone tissues in the form of densely fragmented areas was observed in the extraction sockets of G3 and G5.More extensive new bone tissue formation was detected in the healing socket in the group (G3), which was given royal jelly before extraction compared to the other groups. In the group (G4) given royal jelly after extraction, mature connective tissue filled the socket, but the new bone areas formed were small and less numerous in certain parts of the socket. Histological view of the extraction socket at day 0 after tooth extraction (G0). yellow arrow; proliferating epithelium, yellow star; new bone tissue, red star; connective tissue, black star; alveolar bone, black arrow; adjacent tooth root. (H&E, ×4; scale bar, 500 μm).

OP-074
Comparison of Two Different Treatment Techniques on Mandibuler Anterior Gingival Recessions: Free Gingival Graft vs. Gingival Unit Graft

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Objective: The aim of this study was to compare free gingival grafting (FGG) and gingival unit grafting (GUG) techniques on the treatment of gingival recessions of mandibular anterior incisors.

Materials-Methods: 11 teeth on 4 patients were chosen to be treated by FGG and 10 teeth on 7 patients were chosen to be treated by GUG, randomly. Clinical parameters (attached gingiva width and thickness, gingival recession, probing pocket depth, gingival index, plaque index and the percentage of root coverage) were recorded. Following local anesthesia, recipient site preparation were completed. After preparation, epithelized gingival grafts were obtained with two different techniques. On the FGG group, 1-1.5 mm thick conventional trapezoidal grafts were obtained from the palate. On the GUG group, 1-1.5 mm thick trapezoidal grafts with gingival papillaes were obtained from the palate. Grafts were sutured to the recipient sites. Periodontal dressings were placed. Antibiotics, analgesics were prescribed. Sutures were removed on the 10th day.

Results: After one month, clinical parameters were recorded again. Attached gingiva width and thickness were increased in both groups. On %20 of cases, a full root coverage was achieved on the GUG group, however no full coverage was achieved on the FGG group. Root coverage percentage was found to be %41,92 and %9.58; respectively.

Conclusion: When the clinical objective is to increase attached gingiva, both techniques were found to be effective. But GUG technique enhances better root coverage, within the limits of this study.

Keywords: gingival recession, free gingival graft, gingival unit graft

OP-075
The Evaluation of the Effect of the Pterygo-maxillary Junction Structure on Surgically Assisted Maxillary Expansion by Finite Element Analysis

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Objective: There is no consensus in the literature regarding the osteotomy of the pterygo-maxillary junction(PMJ). Due to the close proximity ofimportant neuro-vascular structures with the PMJ, osteotomy of the PMJ was not advised by some researchers. While pterygo-maxillary osteotomy isn't recommended, another group of researchers argues that this region will create a serious resistance point for maxillary expansion and should be osteotomized. The aim of the present study is to evaluate the effects of three dimesional morphology of the PMJ on expansion pattern and stresses in the maxillofacial region. Thus surgeons can make a decision whether to perform osteomy or not according to diensional differences of PMJ.

Material-Method: The 3-dimensional morphology of the PMJ was measured separately for each dimension by examining 240 maxillary tomographies belonging to 18-30 years old healthy individuals with full teeth available in the archive of our faculty. First quartile, median, third quartile values of the measurements were calculated. Seven maxilla models with different three dimensional PMJ characteristics were modelled and the effect of the structural characteristic of the PMJ on the maxillary expansion pattern and the stresses in the resistance regions was evaluated by simulating the surgical-assisted maxillary expansion.

Results: In models with bigger PMJ dimensions,the stresses were higher in areas such as the zygomatic arch, frontozygomatic suture, medial pterygoid plate etc. At the points where displacement was evaluated, the displacement is decreased with increased dimensions of the PMJ.

Conclusion: Since the three-dimensional structure of the PMJ may affect the maxillary expansion clinically, surgeons may consider to osteotomize PMJ after tomographic evaluations.

Keywords: finite element analysis, surgically assisted maxillary expansion, pterygomaxillary junction

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OP-076
Stress Analysis of Different Fixation Configurations In The Multi-Piece Le Fort I Osteotomies

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Objective: The effects of different fixation configurations on the stability in the multi-piece Le Fort I osteotomies were compared by stress analysis.

Materials-Methods: 4-piece Le Fort I osteotomy was performed on a 3D cranial model created in the MIMICS software. Various plates were placed, and six different fixation configurations were generated:
Model 1: 2 T-shaped titanium miniplates (TSTMP) in the apertura piriformis region (APR), 2 L-shaped titanium miniplates (LSTMP) in the zygomaticomaxillary buttress (ZMB)
Model 2: 2 TSTMPs in the APR, 2 LSTMPs in the ZMB, 2 resorbable horizontal plates (RHP) in the palatal vault with nasal approach
Model 3: 2 TSTMPs in the APR, 2 LSTMPs in the ZMB, 2 horizontal titanium microplates (HTM) under T plates on the buccal aspect
Model 4: 2 TSTMPs in the APR, 2 LSTMPs in the ZMB
Model 5: 2 LSTMPs in the APR, 2 LSTMPs in the ZMB, 2 RHPs in the palatal vault with nasal approach
Model 6: 2 TSTMPs in the APR, 2 LSTMPs in the ZMB, 2 HTMs under L plates on the buccal aspect
The Finite Element Analyses were carried out by ANSYS software. Maximum, minimum, Von Misses stresses, and total deformation amounts were compared.

Results: T-plates have higher beneficial effects on stability. The utilization of additional horizontal plates had led to better outcomes. Model-2 had better outcomes in stress distribution and lower stress values.

Conclusion: Nasal plate application may be an alternative for improving stability, and clinical studies are needed for further investigations.

Keywords: multi piece Le Fort I osteotomy, finite element analysis, fixation

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OP-077
Evaluation of Nasolacrimal Canal Morphology on CBCT in Patients Undergoing Le Fort I Osteotomy: Preliminary Results

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Objective: Le Fort I osteotomy is a safe and successful surgical procedure that is widely used to correct skeletal maxillary deformity. Although the procedure is generally safe, nasolacrimal canal injury may occur in rare cases. Nasolacrimal canal anatomy and morphology should well known to reduce this complication risk. The aim of this retrospective study was to evaluate the nasolacrimal canal anatomical features and localization.

Materials-Methods: 240 bony nasolacrimal canals analyzed on 120 patients who underwent Le Fort I osteotomy. The anteroposterior-transverse diameter of bony nasolacrimal canal, the distance between maxillary buccal cortical bone and nasolacrimal canal were measured at level most superior and inferior of nasolacrimal canal in axial section. The distance between nasal floor and most inferior of nasolacrimal canal were also measured in coronal section. All measurements were performed by the same radiologist.

Results: The anteroposterior diameter of the bony nasolacrimal canal was 5.88±1.12mm at most superior level and 7.68±1.49mm at most inferior level. The transverse diameter was 4.86±0.9mm at most superior level and 4.82±0.94mm at the most inferior level. The distance between maxillary buccal cortical bone and nasolacrimal canal was 3.49±1.78mm at most superior level and 7.15±3.1mm at most inferior level. The most inferior point of nasolacrimal canal was approximately 16.95±2.61mm above to the nasal floor.

Conclusion: The inferior part of nasolacrimal canal may be at risk for injury during Le Fort I osteotomy. Evaluation of the anatomical features of the nasolacrimal canal on preoperative CBCT is important to minimize the risk of nasolacrimal canal injury.

Keywords: Le Fort, nasolacrimal canal, orthognathic surgery

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OP-078
Does Inferior Border and Medial Horizontal Osteotomy Affect The Lingual Split Pattern in BSSO?: Preliminary Results

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Objective: Different lingual split patterns may occur during Bilateral Sagittal Split Osteotomy(BSSO).One of the factors affecting the formation of different split patterns is the osteotomy technique. The aim of this study is to determine the effect of inferior border and medial horizontal osteotomy technique on lingual fracture patterns in BSSO.

Materials-Methods: Retrospective study was designed by the authors on the 126 patients(252 splits) who underwent BSSO acording to Hunsuck Modification. The predictor variable were inferior border osteotomy type(lingual,caudal, buccal) and length medial horizontal bone cut(anterior-posterior of lingula). The primary outcome was lingual split pattern. The predictor variable and primary outcome were evaluated on 3-D reconstruction of CBCT. The outcomes was the types of lingual split pattern on postoperative CBCT images were classified as according to lingual split scale (LSS) of Plooij et al. Fisher Exact test were used to analysis categorical data.

Results: A total of 256 lingual split patterns 134(%68) were LSS type 1,4(%2) were LSS type 2,56(%28) were LSS type 3 and 3(%1.5) were LSS type 4. There was no statistically significant relationship between the length of the horizontal medial bone cut and the LSS($p=0.262$). Inferior border osteotomy extended to the lingual cortex LSS Type 1 was seen at the highest rate. LSS Type 4 (unfavourable split pattern) was higest in buccal osteotomy group. There was statistically significant relationship between inferior border cut type and LSS($p<0.001$).

Conclusion: The results of this study showed that the inferior border osteotomy should extend to the lingual cortex for avoiding unfavorable split pattern.

Keywords: BSSO, Lingual, Split

OP-079
Foudroyant Head and Neck Infections - Diagnosis, Therapy and Outcome

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Objective: Cellulitis and necrotizing fasciitis of the head and neck can cause a life-threatening condition. Early detection and treatment is therefore very important.

Materials-Methods: At our university department for maxillofacial surgery we analyzed 13 patients with fulminant cellulitis and 4 patients with necrotizing fasciitis. All of these patients were urgently hospitalized. They received clinical examinations, blood-tests and computer-tomography. All patients underwent surgery on admission day and were sent intubated and mechanically-ventilated to intensive care. Disease progression, triggers, promoting factors, extent and success of therapy were analyzed as well as complications and the general outcome.

Results: The period between the start of symptoms until arrival in our clinic was on average 36 hours, the period between hospitalization until start of surgery was 3,5 hours. In most cases there was a dental origin of infection followed by skin lesions. In 2 patients the reason remained unclear. In 12 patients the fulminant clinical presentation lead to diagnosis. Radiological imaging showed gas cavities in soft tissues of 8 patients and a mediastinal spread in 4 patients. 7 patients suffered from an immunocompromising primary disease and 5 of severe obesity. 9 patients needed multiple operative interventions such as another incision and drainage or necrosis removal. One patient suffered amaurosis. Two patients died due to infection.

Conclusion: Phlegmonous infections and necrotizing fasciitis of the head and neck are still mutilating and life-threatening. The therapeutic success depends on a prompt surgical procedure and an adequate antibiotic treatment. Regarding the time factor there is a potential for improvement.

Keywords: necrotizing fasciitis, phlegmon, cellulitis

OP-080
In Vivo Consequences Of Biomimetic Implants

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Recently, the popularity of dental implants and additive manufacturing techniques has been increasing. Obtaining complex geometries with additive manufacturing techniques has led to the idea of producing medical products with complex macro and micro geometries in this way. One of the important goals of this study is to increase the bone-implant contact surfaces of dental implants and to achieve a strong osseointegration. The designed surface porosity achieved by additive manufacturing is intended to bring the elastic modulus of titanium closer to that of natural bone. Thus, an attempt was made to obtain a biomimetic surface. For this purpose, dental implants with 2 different surface properties were produced with the additive manufacturing technique. These implants were compared with a conventional dental implant with in vitro analysis. Gyroid type porosity preferred in newly designed implants. Porosity is designed and produced on the entire surface and middle third part of the manufactured implants. After a detailed design and production process, in vivo animal studies, micro-CT analysis and histomorphometric studies were performed. In vivo conditions, animal experiments were successfully completed and osseointegration was achieved in all implants. This type of porosity has been found to cause increased osteogenic activity and was demonstrated by micro-CT and histomorphometry analyses. In conclusion, porous dental implant designs that are both mechanically and biologically equivalent to the currently available dental implant are promising for the future.

Keywords: Biomimetic surface, Implant

OP-081
The effect of impacted third molar tooth on second molar external root resorption, a cone-beam computed tomography study

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Objective: The third molars have the most impacted rate among the impacted teeth, and can cause pathological effects on the adjacent second molars. This study aims to evaluate the effects of factors related to the impacted third molars on external root resorption in adjacent second molars by cone-beam computed tomography(CBCT).

Material Methods: The total number of 437 impacted third molar and adjacent second molar were investigated on cone-beam computed tomography. 381 of them met the inclusion criteria. The collected data were statistically analyzed with R Version 4.1.2(R Core Team) software.

Results: A significant statistical relationship was found in inclination, Pell-Gregory classification, contact area, retention condition. In contrast, root tip formation, missing tooth in the same quadrant and pericoronal follicle width do not show any statistical difference.

Conclusion: Impacted third molar teeth with horizontal and mesioangular position, bone retention, Pell Gregory classification B are more likely to cause root resorption in adjacent second molars. Prophylactic extractions should be considered more especially in these conditions.

Keywords: cone-beam CT, external root resorption, impacted third molar

OP-082
Making a woman smile after 40 years: Multi-step rehabilitation of a cleft palate

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Oral rehabilitation is an important stage for a patient with cleft palate since its obvious effects on quality of life. Regurgitation of contents into nasal cavity and the interference with speech, are the main causes of the suffering in these individuals.This case report presents multi-step rehabilitation of a patient, 48 year old woman, with repaired cleft lip and a neglected cleft palate. Several treatment modalities have been reported for closure of cleft palate. Rich blood supply makes the tongue flap a suitable option especially in large clefts. Our journey started with an anterior based dorsal tongue flap procedure. In the second session, 4 weeks after initial surgery, the flap was divided resulting in satisfactory healing at donor and recipient sites. Six weeks later, bone grafting surgery was performed and the iliac crest bone was used as the graft of choice for alveolar bone augmentation. Final surgery was placing dental implants in the augmented maxilla. Following osseointegration period, maxillary prosthetic rehabilitation was completed. Overcoming soft and hard tissue obstacles step by step, made the achievement of favorable functional and aesthetic results possible.

Keywords: cleft palate, tongue flap

OP-083
The Effect of Single Dose and Locally Applied Teriparatide on Healing of Mandibular Defects in Rat Models

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Objective: Bone grafts are widely used in the repair of bone tissue. In recent years, studies on the use of biomaterials have became popular in order to increase the efficiency of bone grafts. In this study, the effects of local teriparatide used in different doses on bone healing were evaluated.

Materials-Methods: In this study, 30 male Spraque-Dawley rats were used and they were divided into 5 groups, 6 each. A critical sized defect of 5 mm in diameter was created in the mandible. Defects in Group 1 were left empty. Particulate autograft was applied to the defects in Group 2. Group 3 was applied allograft. In Groups 4 and 5, 20 µg and 40 µg teriparatide were administered with the allograft, respectively. At the postoperative 4th week, the anesthesia dose was doubled and euthanasia was performed. The samples were taken out in one piece and evaluated histomorphometrically.

Results: While the amount of newly formed bone tissue (0.28±0.01 mm2) and the number of osteoblasts (41.67±1.56) were significantly lower in Group 1, these values were found in Group 5 (0.79±0.01 mm2), (77.72±3.06) is significantly higher. The findings in Group 4, in which teriparatide was used (0.72±0.01 mm2, 72±4.26), were significantly higher than Group 3 and Group 2. The amount of new bone formation (0.48 mm2) and the number of osteoblasts (54.17±1.99) were significantly higher in Group 3 than Group 2 (0.39±0.01 mm2, 50±1.4).

ConclusionAs a result, it was observed that teriparatide, which was used locally in two different doses, significantly increased bone healing.

Keywords: bone healing, teriparatide, rat mandible

OP-084
In Patients Applying to the Dentistry Clinic; Analysis of Tinnitus Prevalence and Risk Factors Associated with Maxillofacial Pathologies

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Objective: Tinnitus is defined as the perception of sounds from the ears without any acoustic stimulus. Among the risk factors of tinnitus are hearing loss, exposure to loud sounds and maxillofacial pathologies such as temporomandibular disorders, occlusion disorders and bruxism.

Materials-Methods: In our study with 1596 patients who applied to our faculty between 04.10.2021 and 18.02.2022, 7% of the patients had tinnitus. 31% of the patients with tinnitus were male and 69% were female. The mean age was 42.93±15.06 years. 38.9% of the patients with tinnitus had temporomandibular disorder, 66.4% had bruxism, 48.7% had dental pain, and 10.6% had myofascial pain. The ear where the sound came from and the temporomandibular joint with the disorder were on the same side in 38%. None of the patients applied to our faculty due to tinnitus.

Conclusion: There are very few studies in the literature evaluating the prevalence of tinnitus in patients admitted to the dentistry clinic and their relationship with maxillofacial pathologies. In our study, 7% of the patients who applied to our faculty had tinnitus. The relationship between the side of TMD and the ear where the sound came from was statistically significant ($p<0.05$). There are many theories explaining the relationship between maxillofacial pathologies and tinnitus, but none of them have been fully proven. We think that maxillofacial surgeons are a part of the diagnosis and treatment of tinnitus, and further studies on the relationship between tinnitus and disorders in the maxillofacial area will contribute to the management of this disease.

Keywords: tinnitus, temporomandibular disorders, bruxism

OP-085
Odontogenic keratocysts in Gorlin-Goltz Syndrome in pediatric patient: A case report

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Objective: Gorlin-Goltz syndrome (GGS) is a hereditary disease with the symptoms of macrocephaly, frontal ridges, coarse facial features, and facial milia, skeletal abnormalities, heart fibroma, ovarian fibroma, odontogenic keratocysts (OKC) of the jaw, hyperkeratosis of the palms and soles (palmar and/or plantar pits) and ectopic calcification.

Case: In this case report, a patient who applied to the hospital with complaint of swelling in the right mandible. In the anamnesis, the patient stated that she had a cyst enucleation procedure from left maxilla and left mandible region 2 years ago. After pathological evaluation patient was diagnosed with GGS for the first time in the department of maxillofacial surgery. Patient were referred to a pediatric clinic for genetic consultation for examination of GGS. Patient had PTCH 1 gene mutation positivity.

Conclusion: Because GGS could have a threatening condition, long term follow up and become aware of the maxillofacial manifestations is important for early diagnosis.

Keywords: Gorlin-Goltz syndrome, odontogenic keratocysts, pediatric patient

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OP-086
Determination of the Relationship Between Oral-Dental Health and Nutritional Status of Mentally Handicapped Individuals

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Objective: Decayed teeth, gum problems, swallowing difficulties, malnutrition and feeding difficulties complicate the life of disabled patients. In this study; It is aimed to determine the oral-dental health and nutritional status of mentally handicapped individuals and to identify possible relationships.

Materials-Methods: Mentally disabled individuals (n=23) between the ages of 18-65 who underwent dental treatment at Marmara University Faculty of Dentistry participated in the study. Plaque index (PI), gingival index (GI) and bleeding on probing (SK), oral hygiene habits of the participants, oral health status with community periodontal index of treatment needs (CPITN), DMFT and DMFS, chewing functions and nutritional status were evaluated.

Results: The mean age of the individuals participating in the study was 30.04±11.99, of which 11 were male and 12 were female. The mean PI, GI, and SK levels of the individuals were 1.47±0.60, 1.08±0.56, 72.24±13.40%, CPITN, DMFT and DMFS averages were 2.65±0.49, 20.83±7.80, 68.7±33.5 respectively. It was determined that 70.8% of the participants had 3 main meals and 87.5% had at least 1 snack. Meat, fried chicken, peeled apples, raw carrots and nuts were among the foods with the most chewing problems. The body mass index of the female participants was 26.0 kg/m2 on average, and the body mass index of the male participants was 30.8 kg/m2, which was found to be higher than the female participants.

Conclusion: It has been observed that increased poor oral-dental health and impaired nutritional status in individuals with mental retardation are closely related to each other and to general health.

Keywords: Nutrition Status, Oral Health, Intellectually Disabled

OP-087
Management Of Oral Ranula With Modified Micro-Marsupialization: Case Report And Review Of Literature

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Objective: Oral ranulas are cysts in the floor of the mouth that result from the extravasation of mucous. Historically there has been little consensus on the ideal first-line treatment, but currently, definitive treatment involves excision of the sublingual gland, which can injure the lingual nerve and submandibular duct. Minimally invasive surgical alternatives such as micro-marsupialization have been proposed. This technique involves passing of 1 or more sutures through the base of the lesion to create alternate drainage pathway for the collected mucus so that the cyst dissolves and dissipates by itself thereby avoiding surgery.

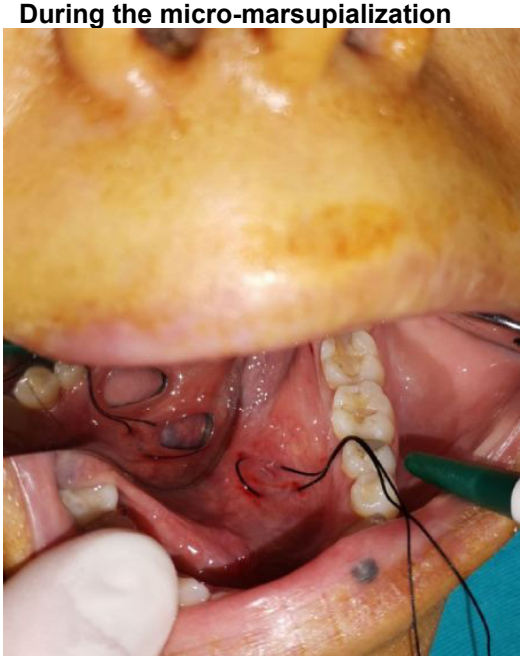
Case: A 40-year-old female patient presented to our department with bubble-shaped lesion located on floor of the mouth, on the left side, with exophytic growth, sessile base, bluish coloration measuring about 1 cm in diameter, showing well-defined limits and borders, smooth surface, and softened consistency. Under the diagnostic hypothesis of the ranula, a modified micro-marsupialization was performed. After the 50 days of observation, complete regression and repair of the lesion was observed without recurrence.

Conclusion: Modified micro-marsupialization is a simple, minimally invasive, low-cost, comfortable technique for both patient and operator with a decent percentage of successive rate. It is well-tolerated by the patient, mainly uncooperative patient.

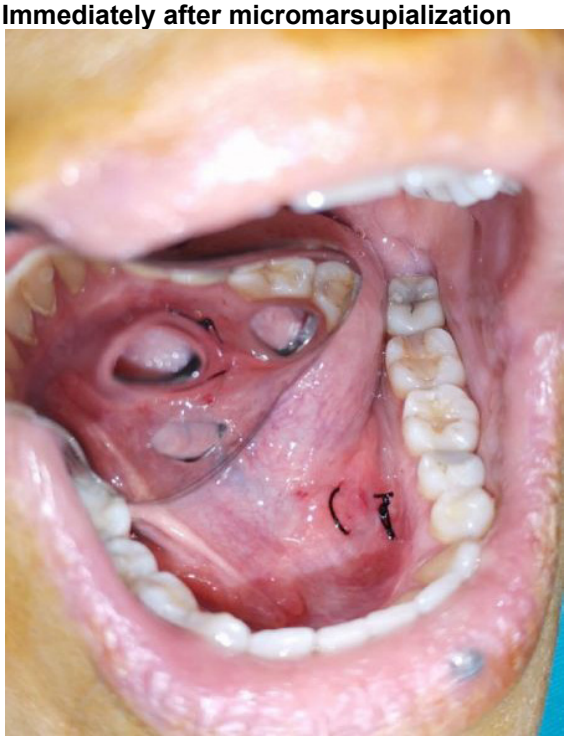
Keywords: Ranula, Micro-marsupialization, Invasive

50th day at micro-marsupialization

During the micro-marsupialization

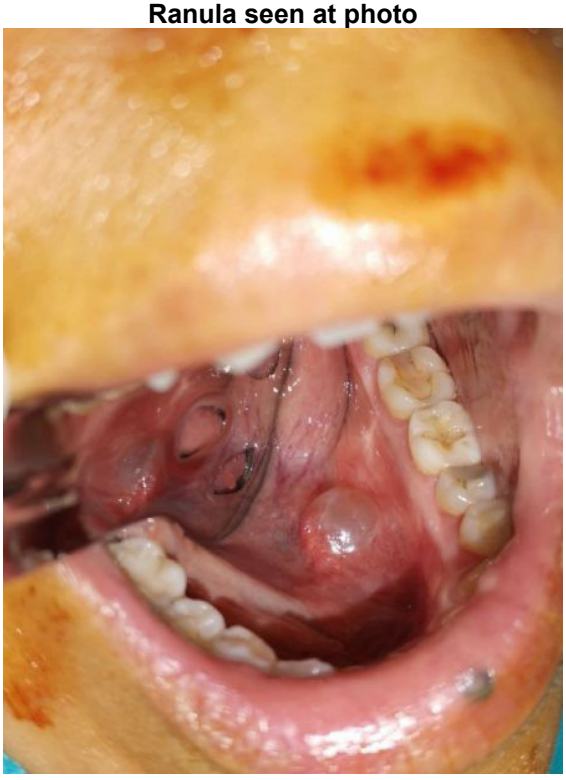


Immediately after micromarsupialization



Immediately after suture removal 50th day

Ranula seen at photo



OP-088
Villonodular synovitis of the temporomandibular joint: Case report

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Objective: PVNS (Pigmented Villonodular Synovitis) is a rare, roliferative locally aggressive lesion of unknown etiology originating from the synovial membranes of the joints, inter-articular spaces and tendon sheaths.The knee joint is the most common starting site. TMJ as a site of occurrence for PVNS is extremely rare.

Case: A 35-year-old female patient was admitted to our clinic with complaints of limited mouth opening and severe pain in the left TMJ region for a year. As a result of MR imaging, it was observed that there was unreduced disc displacement in the right TMJ region, fatty atrophic changes in the muscles around the condyle where the disc could not be selected in the left TMJ region, effusion, and subchondrial sclerotic changes on the condylar surfaces facing the joint. Arthrocentesis treatment performed with Cingal in addition to splint treatment. After 3 months of follow-up, due to progressing pain the patient was consulted to the algology department with the initial diagnosis of neuropathic pain and TCA was prescribed and stellate ganglion blockade was performed. Due to the persistent pain and degeneration in the joint area, discectomy operation was planned and the fossa eminence prosthesis was produced by custom design in3D and placed after discectomy. After pathological examination, the diagnosis of villonodular synovitis was made.

Conclusion: Villonodular synovitis is a difficult disease to diagnose and treat, with a high recurrence rate because of its low incidence. Long-term follow-up is required for the results of the treatments applied. Villonodular synovitis should be considered for the diagnosis in case of progressive pain refractory to treatment.

Keywords: Villonodular synovitis, Fossa-eminence Prosthesis, Temporamandibular joint degeneration

OP-089
Late Oral Findings From Acute Lymphoblastic Leukemia Treatment; Case Presentation

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Ege University Faculty of Dentistry

Objective: Leukemia is the most common type of cancer in childhood. While leukemias constitute 25-30% of childhood cancers, approximately 97% of leukemias are acute leukemias. Acute leukemias are divided into two groups as lymphoid and myeloid. ALL is seen approximately five times more frequently than AML. Leukemia, which is most commonly detected in children aged 1-4, is seen twice as often in men. Leukemia is most often treated with chemotherapy or approaches that combine chemotherapy and radiotherapy. The aim of our study is to reveal the intraoral findings of chemotherapy and radiotherapy and the factors that should be considered in surgical treatment.

Case: A 17-year-old male patient, who received radiotherapy and chemotherapy as the treatment of ALL, underwent bone marrow transplantation, was consulted to us for the treatment of osteonecrosis in the maxilla. In the clinical examination, exposed bone were detected around the both right and left premolar and molar region. The relevant teeth were extracted and the sequestrant bones under it were resected, and the primary closure was performed by applying cgf.

Conclusions: Oral side effects are seen in 40% of patients due to chemotherapy and radiotherapy; such as early and late effects. Spontaneous gingival and mucosal bleeding and ulcerations in the mucosa are seen in the early period. In the late period, osteoradionecrosis, limitation of temporomandibular joint mobility and growth retardation can be seen. Osteonecrosis is one of the most common and serious complication characterized by exposed bone tissue with/without pain, drainage and fistula formation.

Keywords: Leukemia, Chemotherapy, Osteneocrosis

OP-090
Estimating the need for dental sedation in pediatric oral surgery procedures

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Objective: The control of pain and dental anxiety is one of the major challenges in dentistry, especially in pediatric patients. Bad experience in dentistry leads high anxiety and dental fear, and it effects the patient's whole life. European Academy of Pediatric Dentistry (EAPD) have a guideline for pediatric sedation but the guideline is inadequate about the indications of sedation in pediatric patients. Our aim is to develop a tool for sedation need of the pediatric patients in minor oral surgery procedures before they had a bad experience.

Materials-Methods: 500 Pediatric patients, ages 2-16 were included in this pilot study who planned to underwent to minor oral surgery procedures in Marmara University Oral and Maxillofacial Surgery Department Clinics. Children's fear survey schedule- dental subscale (CFSS-DS) is used to assess patients' level of anxiety. Preoperatively CFSS-DS questionnaire form was filled out by patients and their family members. Patients' medical status and oral surgical treatment is ranked and recorded by dentist before the procedure. Intraoperative and post-operative all data included, complications, complains, completed or non- completed treatment were recorded and grouped. Statistical analyses was performed by using SPSS version 13 programme.

Results: Most of the non-completed procedures were in high anxiety and complex treatment groups.

Conclusion: As a conclusion, this study may serve as a tool for dentists and surgeons easily to decide either to perform treatments under sedation or local anesthesia in pediatric patients.

Keywords: anxiety, sedation, pediatric

OP-091
Investigation of the level of knowledge about emergency clinical situations that may develop in dental procedures

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Kırıkkale Üniversitesi Ağız Diş ve Çene Cerrahisi Anabilimdalı

Acute systemic pathways that may develop in dental practice; requires rapid intervention. It is possible to prevent morbidity and mortality with early diagnosis and effective intervention. Many studies of the prevalence of medical emergencies have shown that nearly every general practitioner has to deal with an emergency during their professional career. According to the literature, the most common emergency situations are syncope, anaphylaxis, hypoglycemia, orthostatic hypotension and hypertensive crisis. Dentists and dental students' lack of practical skills in emergency preparedness, emergency medical equipment and personnel knowledge is a problem in many countries around the world. Many studies have highlighted the need for improvement in dental education in medical emergencies. Dentists should know how to use the specified drugs and devices to be able to give first aid to the patient before the emergency aid team arrives. The aim of the study is to evaluate the level of knowledge of our 4th and 5th grade students studying at Kırıkkale University, Faculty of Dentistry about the emergency situations that they may encounter in the clinic, such as systemic toxicity of local anesthesia, hypotension, hypoglycemia, anaphylactic shock. It is planned to ask the students questions about clinical symptoms and signs, risk factors, diagnosis and treatment methods within the scope of the questionnaire regarding the stated medical emergencies. Within the scope of the Term 3 curriculum at our university, theoretical training was given to the students of local anesthetic systemic toxicity, anaphylaxis, hypotensive and hypoglycemic shock.

Keywords: Dentists, anaphylaxis, medical emergencies

OP-092
Evaluation of the Covid-19 Awareness of Dentists in Turkey

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"Coronavirus disease-2019 (COVID-19)", which has spread rapidly all over the world after emerging in Wuhan city of Hubei province of China in December 2019, was declared as a pandemic by the World Health Organization (WHO) on March 11, 2020. Although it has been scientifically proven that the people infected with coronavirus via droplets under normal conditions, the close contact of dentists with patients in dental clinics and faculties increases the risk of COVID-19 transmission for both doctors and staff, as well as patients. The risk of contamination with blood and saliva secretion during the pandemic process and the formation of aerosols during many dental treatments have increased the concern about COVID-19 among dentists. For this reason, many studies are being conducted to increase the knowledge and awareness of dentists all over the world. The aim of this study was evaluated 770 dentists working in university hospitals, oral and dental health centers and private outpatient clinics throughout Turkey. This survey was used to assess Turkish dentists' awareness of COVID-19 infection. It has been found that Turkish dentists have a high level of awareness about COVID-19 symptoms and transmission routes, the use of PPE, and the higher risk of transmission in dental clinics.

Keywords: Covid-19; Dentists;

OP-093
Bening Fibroosseous Lesions of Bone in the Jaws: Report of Two Cases

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Objective: Cemento-osseous dysplasias are a group of disorders known to originate from periodontal ligament tissues and involve, essentially, the same pathological process. They are usually classified, depending on their extent and radiographic appearances, into three main groups: periapical (surrounds the periapical region of teeth and are bilateral), florid (sclerotic symmetrical masses) and focal (single lesion) cemental dysplasias. Two cases of benign fibroosseous lesions were included in our presentation. The aim of this study is to make a clinical diagnosis of fibroosseous lesions and to specify lesions that do not require treatment.

Case: First case, a 48-year-old female presented for routine dental care. Panoramic radiograph demonstrated an asymptomatic, focal, mixed radiolucent/radiopaque lesion with irregular borders in the tooth bearing areas. A diagnosis of ossifying fibroma was made as a result of biopsy taken from the lesioned area. Second case, a 58-year-old female tooth 36-37 were carious and nonvital. Orthopantomograph showed globular radioopaque masses, scattered in both the quadrants of the lower jaw. Biopsy of this lesion showed formations of dense sclerotic calcified cementum-like masses. The periphery of the lesion showed globular or ovoid structures of cementoid appearance involved by thin fibrous tissue.

Conclusion: The histopathologic features of fibroosseous lesions can be similar. Therefore, imaging findings are crucial to arrive at a definitive diagnosis. Clinical information, for example, age, gender, and race of the patient, are important factors that help in arriving at a diagnosis of similar appearing fibroosseous lesions. It is recommended to follow these lesions instead of their total excision.

Keywords: Cemental Dysplasias, Fibroosseous Lesions

OP-096
Finite Element Analysis of Caudally and Buccally Screwed Customized Reconstruction Plates for Lateral and Central Segmental Defects of Mandible

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Objective: The aim of this study is to compare locking reconstruction plates with caudo-buccally screwed custom mandibular reconstruction plates in bridging lateral and central mandibular segmental defects by using finite element method.

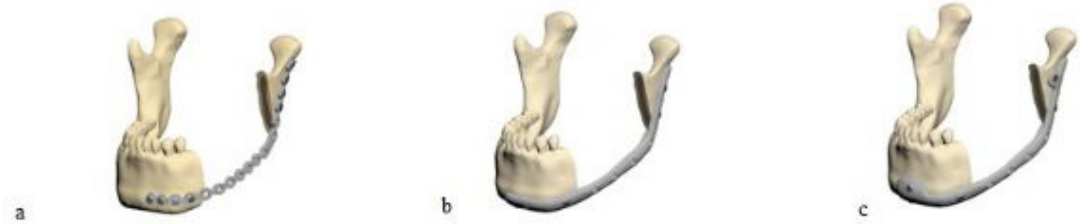
Materials-Methods: A three-dimensional finite element model of the mandible and masticatory muscles were produced. Central and two types of lateral segmental defects were created on this model and bridged with locking reconstruction plates, caudobuccal plates and extended surfaced caudobuccal plates. Stress formation on hardware and screws under masticatory simulation was evaluated.

Results: The stress values on plate and screws were higher in locking reconstruction plate than custom plates. The stress values on screw were higher for screws close to the resection area. Caudobuccal plates revealed slightly higher Von Mises stresses than extended surfaced caudobuccal plates.

Conclusion: The study reveals that the caudobuccally screwed custom reconstruction plates had a favourable effect on stress distrubition and can significantly enhance stability of the implant as preserving preoperative shape of face and mandible.

Keywords: Oral cancer, reconstruction plates, segmental defect

Finite element models of lateral segmental defects reconstructed with locking reconstruction plate (a), caudobuccal plate (b) and extended surfaced caudobuccal plate (c)



OP-097
Maxillary Anterior Segmental Osteotomies in Orthognathic Surgery: Case Series

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Objective: Maxillary anterior segmental osteotomies are currently the most frequently applied surgical method in patients with maxillary prognathism where posterior movement of the maxilla is not required, anterior vertical maxillary excess with excessive gummy smile, and anterior open bite. Maxillary anterior segmental osteotomy significantly reduces treatment time compared to conventional orthodontic treatment, prevents root resorption from orthodontic treatment and provides immediate improvement in facial profile.

Cases: In this case series, 6 cases who applied to Süleyman Demirel University Oral and Maxillofacial Surgery Clinic with the due to dentofacial deformity and were treated with maxillary anterior segmental osteotomies will be presented.

Conclusion: Maxillary anterior segmental osteotomies can be an alternative to long-term orthodontic treatments, or they can be applied in combination with orthodontic treatments. After this approach, which can be safely applied within the appropriate indication, the increase in the risk of avascular necrosis should be considered, and maximum care should be taken not to disrupt the blood supply of the operation field.

Keywords: Orthognathic surgery, Maxillary anterior segmental osteotomy

OP-098
Changes in Craniocervical Posture After Orthognathic Surgery in Patients with Dentofacial Deformities

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Objective: The purpose of this study was to evaluate craniocervical posture and craniofacial changes using computerized tomography after bimaxillary orthognathic surgery.

Materials-Methods: The data for institutional retrospective study were systematically selected according to specified inclusion and exclusion criteria from pre and postoperative tomography data of 12 male and 13 female patients undergoing bimaxillary orthognathic surgery. Radiographs were taken with centric occlusion wax bite records 2 weeks before and 6 months after orthognathic surgery. All measurements for craniocervical posture were repeated 3 times by the same investigator at 2 week intervals.

Results: Significant correlations were observed between rotation of mandible and craniocervical posture. Statistically significant differences were found for angle formed by ML (midline of skull base) and OPT (odontoid process tangent) between pre and postopertaive radiography. There was no statistically significant variation according to genders.

Conclusion: The findings of this research showed changing the position of mandible affects craniocervical posture.

Keywords: craniofacial morphology, craniocervical posture, orthognathic surgery

OP-099
Pilot Study: Investigation Of Systemic Conditions' Effect on Patients at Oral Surgery About Anxiety With Different Tests

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Objective: This study aimed to determine the distribution of anxiety in patients scheduled for surgery using two anxiety measurement tests, to evaluate the effects of systemic diseases on anxiety values and to compare these two tests with each other.

Materials-Methods: A total of 45 patients, including 30 patients without systemic problems(G1) and 15 patients with an additional systemic health problem(G2), who referred our clinic and surgical procedures were planned under local anesthesia, were randomly selected. The anxiety levels of the patients participating in the study were evaluated with the Beck Anxiety Scale(BAI) and the Amsterdam Preoperative Anxiety(A) and Information(B) Scale(APAIS-A/B).

Results: Statistical analysis of the pilot study was evaluated with the Spearman correlation coefficient, and the Mann-Whitney U Test. The scores of G2 were found to be statistically significantly higher in the BAI and APAIS-B tests compared to G1(0.012, 0.001). It was found to be higher in the APAIS-A scores, although not statistically significant(0.317). When all patients were examined, it was observed that there was a moderate correlation between APAIS-A/APAIS-B and BAI/APAIS-B(.441,561).

Conclusion: In this pilot study, it was observed that the anxiety values of G2 were higher than G1 in both tests. Patients with high anxiety values in both tests are more willing to be informed about the surgery. It is important to know that patients with additional systemic problems have higher anxiety scores and that patients with high anxiety are more willing to be informed about the surgery in terms of patient cooperation and surgeon's success during surgery.

Keywords: Anxiety, APAIS, Beck Anxiety Scale

OP-100
The relationship between implant loss and antiresorptive drug in postmenopausal female patients

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Objective: Bisphosphonates have been located at the forefront of OP treatment protocols for many years. Denosumab, is an antiresorptive agent like bisphosphonates. Denosumab is a human monoclonal (IgG2) antibody targeting nuclear factor-B ligand, a key mediator of bone resorption. However, with the use of both agents, osteonecrosis of the maxilla and mandibula may develop.

Materials-Methods: A total of 16 postmenopausal women who have had successful osteointegration earlier followed by implant loss was retrospectively evaluated.

Results: The mean age of the patients was 58.43±6.58. All patients had periimplantitis at admission and implants were removed from all patients. The area was curetted and necrotic residues were removed. Graft was applied to 4 of 5 patients. Antibiotic therapy was given to all patients. Among the patients who developed implant failure, the number of those who received osteoporosis treatment was five and the percentage was %33.1. Three of the patients were using bisphosphonates (2 alendronate, 1 zoledronic acid) and two of them were using denosumab. Calcium levels were compared between antiresorptive drug users and non-users and no significant difference was found. Vitamin D levels were found to be significantly higher and ALP levels were lower in the group that received osteoporosis treatment compared to those who did not (40,72±7,37 to 57,20±3,54 and 114,40±10,64 to 75,63±7,05 respectively).

Conclusion: According to the data we obtained in this study, it should be kept in mind that the use of antiresorptive drugs may cause an increase in implant failure. Special groups such as postmenopausalpatients should be followed carefully after the implant application.

Keywords: Osteoporosis, Bisphosphonates, implant

OP-101
Evaluation of Social Appearance Anxiety and Post-Treatment Satisfaction of after Orthognathic Surgery

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Objective: Orthognathic surgery is a reliable method that has been preferred for many years in the treatment of dentofacial deformity. According to the literature, it has been reported that people with normal face proportions have a higher chance of success and preference in their life cycle. In this case, having a dentofacial deformity causes a decrease in the acceptance and self-confidence of the person in the society. There is a rapid change in facial aesthetics after orthognathic surgery, and this provides a significant increase in the self-confidence of people with deformities.

Materials-Methods: The study included 73 patients with dentofacial deformity and a control group of 45 people, whose surgeries were completed in the same center between 2015-2021. All participants in the study answered the Social Appearance Anxiety Questionnaire. In addition, the patient group was asked to fill out the Post-Orthognathic Surgery Satisfaction Questionnaire.

Results: When the patients with dentofacial deformity were compared with their preoperative status, it was found that the increase in self-confidence and decrease in social anxiety after orthognathic surgery were statistically significant. It was observed that the responses of the patients to the Social Appearance Anxiety Questionnaire in the postoperative area were correlated with the responses of the control group. In addition, according to the satisfaction survey, all individuals were satisfied with orthognathic surgery.

Conclusion: This study, like most studies in the literature, reports that as a result of orthognathic surgical procedures, patients' self-confidence increases and they become more acceptable to the society.

Keywords: Orthognathic surgery, Self esteem, Self-confidence

OP-102
Complications of Open Reduction and Internal Fixation of Mandibular Condylar Fractures in Oman

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Objective: Mandibular fracture is the second most common facial fracture. Management of mandibular condylar fractures with Open Reduction and Internal Fixation (ORIF) is gaining wide popularity worldwide. The aim of this study is to report the complications rate associated with ORIF of mandibular condylar fractures in Oman.

Materials-Methods: A retrospective cohort study was conducted among all patients who underwent ORIF of condylar fractures at Al-Nahdha Hospital and Sultan Qaboos University Hospital, Muscat, Oman, from January 2008 to December 2020. Data collected included; patient demographics, fracture aetiology, fracture side and type, surgical approach, and recorded complications.

Results: A total of 68 patients (59 males and 9 females, mean age of 30.1 years) with 83 mandibular condylar fractures underwent ORIF during the study period. Subcondylar fracture was the commonest type accounting for 62.7% and bilateral fractures occurred in 21 (30.8%) patients. The most common surgical approach was retromandibular accounting for 42.2%.The overall rate of recorded complications was 42.6% and the commonest reported complications were transient facial nerve palsy (18.1%), followed by malocclusion and restricted mouth opening accounting for 14.7% and 9.6%, respectively. Subsequent surgical intervention to correct malocclusion was needed in six cases. There was no statistically significant difference in overall complications and the patient's clinical characteristics.

Conclusion: Although ORIF of condyle fracture offers a favourable outcome, it carries a small risk of developing a few complications. The APTMR approach had the least associated complications in comparison to other surgical approaches.

Keywords: Mandibular Fracture; Mandibular Condyle; Open Fracture Reduction; Complications; Facial Nerve Injuries; Oman

OP-103
Conservative and invasive approaches in the treatment of large odontogenic cystic lesions

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Odontogenic cysts are endosteal lesions of the jaws associated with teeth. Odontogenic cysts often grow very slowly, but they can reach large sizes. Clinical and radiographic findings should be evaluated together in the diagnosis of cysts. Treatment of odontogenic cysts has a vast place in oral and maxillofacial surgery applications. Odontogenic cysts can be treated with surgical options such as enucleation, marsupialization, and decompression. Since the cyst is completely removed in enucleation, its histopathological examination is more reliable, and there is no need for continuous postoperative control as in marsupialization. There are also disadvantages of enucleation, such as infection of the clot formed in the cavity, recurrence when cyst epithelium remains, damage to anatomical neighborhoods, especially in large cysts, and spontaneous bone fractures. When the cyst is less than 3 cm in diameter, spontaneous bone regeneration occurs after the primary excision of the cyst. The treatment approach is controversial in larger cysts (over 3 cm). Some surgeons may prefer decompression as a treatment option in these situations. The surgeon who will choose the appropriate surgical procedure should have information about the pathological development of the cyst. The basic principle is that the treatment to be chosen should not cause functional or aesthetic problems and should be applied to prevent recurrence as much as possible. This case series aims to share our clinical experience with large odontogenic cysts treated with invasive and conservative approaches.

Keywords: odontogenic cyst, marsupialization, enucleation

OP-104
Evaluation of intraoperative ankaferd and diode lazer applications in bilateral impacted third molar surgery with postoperative findings

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Objective: Third molars have been either impacted or appositional with developing generation, thus disrupting the occlusion. For this reason, impacted third molar surgical extraction is preferred in most cases. Surgical removal of third molars can result in postoperative complications as pain, swelling, trismus, infection, and alveolar osteitis. Many studies have been done for the control post operative complications. (Ankaferd, topical ozone, laser, steroids, prf etc.) The purpose of this study is evaluation of intraoperative ankaferd and diode laser applications in bilateral impacted third molar surgery with postoperative findings.

Materials-Methods: 22 patients with 44 impacted third molar are included in this study. Patients are divided in three groups. ankaferd and diode laser performed as test groups whereas no complication is observed at control group. The outcome variables are postoperative mouth opening, pain, swelling, number of analgesic doses required from each group at postoperative 3. and 7. Days.

Results: Our clinical findings are showed that the maximum mouth opening decrease, the pain, swelling and number of analgesic doses requirement increase at ankaferd group compared with diode and control groups. Any different postoperative findings was not observed at Diode laser group.

Conclusion: This study showed that there is not any significant positive effect of ABS and diode laser for postoperative findings. Ankaferd which is used as a hemostatic agent but after the surgery the surgeon can expect eudema. This presented study was a pilot study. Further clinical studies with larger and standardized samples are needed.

Keywords: diode laser, hemostatic agent, wisdom tooth

OP-105
Application of TMJ Prosthesis After Multicystic Ameloblastoma Resection: A Case Report

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[2]Selcuk University Faculty of Dentistry Department of Oral and Maxillofacial Surgery, Konya

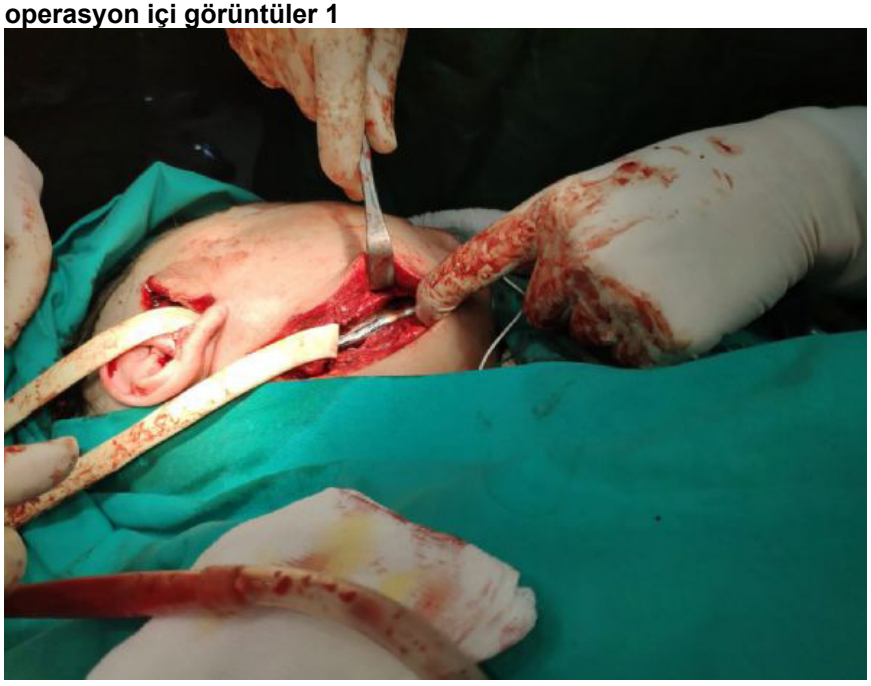
Objective: Ameloblastoma treatment includes variable methods from conservative to radical. A radical treatment option needs to consider reconstructive procedures. Alloplastic joint prostheses which have been popular in recent years can be used. In this case report, we present a case who was rehabilitated with an alloplastic joint prosthesis after radical ameloblastoma treatment.

Case: A 64-year-old patient referred to our clinic. In the radiological examination, a multicystic lesion extending from the corpus to the condyle of the right mandible was noticed. The biopsy procedure was applied under local anesthesia. The pathological examination result was ameloblastoma. Segmental resection of the relevant region and rehabilitation with a custom TMJ prosthesis in the region. The patient has been followed up for 5 months after the operation and is still being followed up.

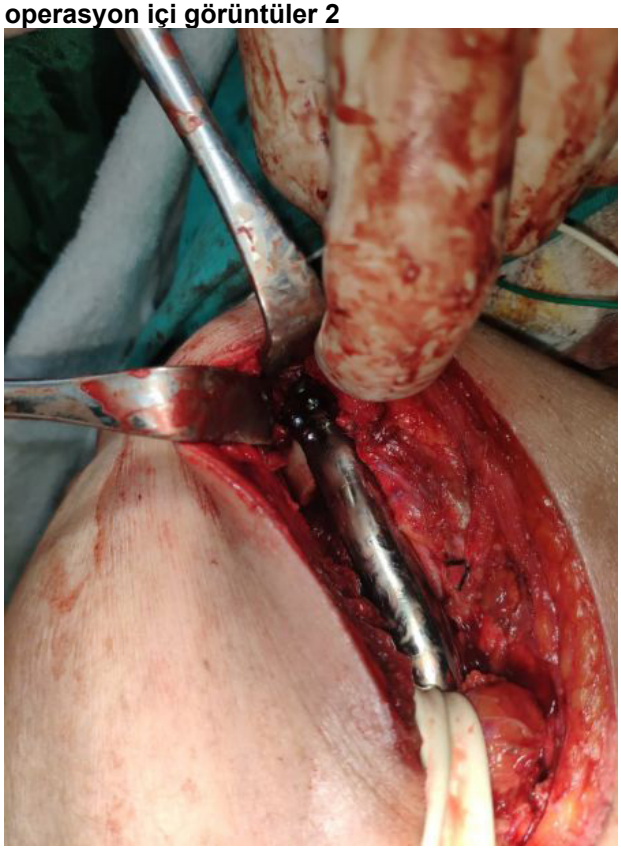
Conclusion: After the TMJ prosthesis we applied to our patient, our patient's speech and chewing function were largely preserved. In addition, there were no cosmetic problems. Although applying TMJ prostheses is more expensive than other radical treatments, it contributes greatly to patient morbidity.

Keywords: ameloblastoma, reconstruction, temporomandibular prosthesis

operasyon içi görüntüler 1



operasyon içi görüntüler 2



operasyon içi görüntüler 3

post-op radyograf

pre-op radyograf

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OP-106
Retrospective evaluation of microbial colonization of necrotic bone in medication-related osteonecrosis of the jaw

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Objective: The development and progression of MRONJ have been associated with bacterial infection of the maxillofacial region. According to the literature, microbial variety has been found in microbiological samples isolated from MRONJ lesions dealing with opportunistic infections. Infection's role in the etiopathological process of MRONJ has become a new feature of the disease's etiology and management. Our study aimed to describe microbial flora associated with MRONJ.

Materials-Methods: 44 patients with stage 2 and stage 3 MRONJ were included in the study. Biopsies were taken from the underlying bone after sequestecromy was performed. In addition, anaerobic microbiological culture was used to assess the bacterial profile of MRONJ bone samples.

Results: A highly diverse microbial flora was detected in necrotic bone. Based on bone culture results, the most common microorganisms were dominantly Actinomyces spp (72%) and Candida spp. (12%) Veillonella spp., Lactobacillus spp., E. Coli, Streptococcus oralis, and Prevotella spp. were other detected microorganisms.

Conclusion: Infections in patients with medication-related osteonecrosis of the jaw include a wide range of microorganisms. Along with Actinomyces spp., Streptococcus spp., Prevotella spp., and Veillonella spp. are common in MRONJ lesions. The role of microbial diversity in the pathogenesis of MRONJ is not yet fully understood. Microbiological examination in treatment planning and patient-specific treatment may contribute to a better prognosis in the management of stage 2 and stage 3 MRONJ.

Keywords: MRONJ, bone infections, oral microbiota

OP-107
Three-Dimensional Finite Element Analysis of Stress on Short Implants of Two Different Designs

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Objective: This study aimed to evaluate difference between the stress level and distribution around the BL and TL short implants, and their surrounding structures, using three dimensional FEA.

Materials-Methods: Models of TL and BL short implants were prepared for three-dimensional finite element analysis. Vertical loads (150 N) were applied to the central fossa of the crown, and oblique loads (50 N) with 45° angulation were applied to the mesiobuccal cusp of the crown from the long axis of the implant. Von Mises stresses and maximum principal (tensile) and minimum principal (compressive) stresses were evaluated.

Results: The stress distributions on the abutments and implants were concentrated on the neck part of the abutments and implants in the both models. The distribution of compressive and tensile stresses in the cortical bone concentrated on the neck of the implant body in the both models for vertical as well as oblique loading. The highest compressive stress values of the cortical bone were observed at the lingual site near the neck of the implant, whereas the highest tensile stresses of the bone occurred on the buccal side as the result of 50 N oblique load. All measured stress values on implant, abutment, and bone were higher in the BL model.

Conclusion: Although the measured stress values were higher in the BL model, it was observed that the stress values were not high enough to cause failure in either models.

Keywords: bone level, short implant, tissue level

OP-108
Does Coronavirus Anxiety and Fear cause Bruxism?

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Objective: Bruxism is a repetative jaw-muscle activity characterized by involuntary contraction of temporomandibular joint(TMJ) muscles. It's often associated with stress and may be defined as a sign of stress. Covid-19 leads to many problems and changes in psycological situation is thought to be the most important and long lasting one. Literature knowledge is limited as Covid-19 is a new entity and the relationship between its anxiety and bruxism has not been investigated yet. In this study we aimed to investigate the relationship between the anxiety and fear of Covid-19 and bruxism.

Materials-Methods: Sixty patients attended to DentalFaculty of AnkaraUniversity were included in this study. Demographic properties, morning jaw pain, tooth pain and day bruxism were recorded. Degree of disfunction in TMJ, abrasion of tooth, presence of anxiety about coronavirus and the effects of this fear in their lives were evaluated using Fonseca Anamnestic Index(FAI), BEWEindex, Coronavirus Anxiety Scale(CAS) and Covid-19 Fear Scale(CFS).

Results: %82 of the patients were female, %18male with a mean age 31.9mean value for FAI was 58.44±21.63, CAS 9.57±1.28, CFS 16.90±3.66. According to FAI patient number with moderate temporomandibular joint dysfunction(TMJD) was24, severe cases were20, mild cases were15 and without TMJD were2. Positive correlation was obtained between TMJD and jaw pain, also with CASandCFS($r=0.387, p=0.002$; $r=0.476, p<0.0001$,respectively). The values were similar in both males and females.

Conclusion: In this study it is concluded that anxiety and fear of coronavirus may lead to bruxism. Increasing the awareness about this subject will help the early diagnosis and proper treatment planning of bruxism.

Keywords: coronavirus anxiety, coronavirus fear, bruxism

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OP-109
The Evaluation of Coronavirus Fear,Anxiety and Fear of Death in Final Year Dentistry Students

Ayşe Hande Arpacı, Mine Cambazoğlu, Serpil Altundoğan, Mahsun Yıldız, Mert Özlü
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Objective: Covid-19, is a viral infection which may cause many serious disorders,eventually death. The pandemic situation has led to public health measures that have forced populations to remain isolated and take steps to prevent the spread. These obligations created fear and anxiety especially in sensitive personalities which is known as 'Coronaphobia','Corona Anxiety' as well as 'Fear of Covid-19'. Difficulty in preventing social distance and being in frequent contact with infected patients increases the risks of Covid-19 in dentists. It is not well known how fear and anxiety is influenced under such working conditions. In this study,the fear and anxiety in final year dentistry students was evaluated by 'Coronavirüs Anxiety Scale','Covid-19 Fear Scale' and 'Thorson Powell Death Anxiety Scale'.

Materials-Methods: After ethical commitee approval the vaccination and infection rate of Covid-19 in final year dentistry students of AnkaraUniversity has been recorded. Next by, 'Covid-19 Fear Scale', 'Coronavirus Anxiety Scale' and 'Thorson Powell Death Anxiety Scale' their fear and anxiety has been evaluated.

Results: 180 students(%64.4female,%35.6male) were involved in this study.Coronavirus anxiety revealed to be low(3.93±4.29),coronavirus fear(15.52±5.82) and fear of death(49.91±16.83) revealed to be moderate.Coronavirus fear was found to be lower in male students($p<0.05$).4students were vaccinated once and another 4students had no vaccination at all,41(%22.8)students had already the Covid-19infection(Table 1).

Conclusion: Covid-19 pandemic caused moderate fear and anxiety of death in students.Gender revealed to be effecting the amount of fear. Professional precautions,awareness as well as the decrease in death and covid-19 cases showed that the intensity of fear and anxiety was not that much high.

Keywords: anxiety, fear, Covid-19

Datas of Cases

	N=180 Mean ±SD N (%)	Median (minimum-maximum)
Gender (Female/Male)	116 (64.4)/64 (35.6)	
Vaccine(0/1/2/3/4/5)	4 (2.2)/4(2.2)/27 (15)/44 (24.4)/74(41.1)/27 (15)	
Covid-19 (Had/Had not)	41(22.8)/139 (77.2)	
Coronavirus Anxiety Scale	3.93±4.29	2.00 (0-20)
Covid-19 Fear Scale	15.52±5.82	15.50 (7-35)
Thorson-Powell Death Anxiety Scale	49.91±16.83	49.00 (12-89)

OP-110
Challenging Diagnosis: A Case Report of Diffuse Large B Cell Lymphoma of the Oral Cavity Mimicking Canine Fossa Abscess

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Objective: To report a case of a challenging diagnosis involving a primary large diffuse B cell lymphoma of the oral cavity mimicking a canine fossa abscess.

Case: A 64-year-old female patient was referred to our clinic with a painful swelling which was lasting for 1 mouth in the left anterior region of the maxilla involving the anterior teeth. The clinical examination revealed left maxillary canine has decay with apical widening of periodontal space in OPTG suggesting the abscess formation. Abscess drainage was performed with extraction of the maxillary left canine and antibiotherapy was started parenterally. However, no regression was observed at the control appointment which was 3 days after drainage. Incisional biopsy was performed under local anesthesia. The histopathological examination revealed a diffuse proliferation of atypical large lymphoid cells. The tumor cells showed immunopositivity for CD20, CD5, CD10 and Ki67 (95%). The diagnosis of diffuse large B cell lymphoma was established. Patient is still followed with hematology department and is receiving maintenance chemotherapy.

Conclusion: Lymphomas of oral cavity are rare and may have nonspecific clinical features that mimic benign oral and dental pathological conditions. Therefore, detailed clinical evaluation should be performed for early and accurate diagnosis, and histopathological examination is absolutely necessary in suspicious lesions.

Keywords: *B Cell Lymphoma, Canine Fossa Abscess*

OP-111
Evaluation of the Knowledge Levels of the Clinic Staff on Hepatitis Virus Infection in Bursa Oral and Dental Health Training and Research Hospital

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Objective: Hepatitis B virus (HBV) infection is an important global public health problem in that it causes chronic infection and threatens life. Occupational exposure is one of the important ways of transmission, and dentists and personnel related to oral and dental health are considered as an important risk group. The aim of this study was to evaluate knowledge of HBV infection practices among Bursa Oral and Dental Health Training And Research Hospital staff.

Materials-Methods: In this study; The hepatitis B vaccination status, knowledge level of hepatitis B infection and general infection prevention practices of the participants were questioned. The level of knowledge was evaluated with 60 questions, and the total knowledge score was calculated with 1 point for each correct answer.

Results: While the percentage of the participants who were educated about HBV infection was 52.6%, the percentage of those who had HBV vaccination was 64.5%, the percentage of those who had the antibody level measured after vaccination was 41.2%. While the rate of the participants who had periodic examinations was 29.7%, the rate of those who had a work accident in the last 1 year in terms of infection risk was measured as 22.3%. The total score of the participants was found to be 40.1±12.7 out of 60 points.

Conclusion: As a result, HBV awareness of oral and dental health workers is not at the targeted level. It is important for healthcare professionals to receive training on HBV infection in order to prevent cross-infection risks.

Keywords: Healthcare professionals, hepatitits B infection, knowledge

OP-112
Assessment of the Mandibular Lingula: Comparison of Skeletal Patterns Using Cone-Beam Computed Tomography

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Objective: The position of the mandibular lingula (ML) affects the success rate of the inferior alveolar nerve block (IANB) and ramus osteotomies. The aim of this retrospective study is to determine the position of the mandibular lingula in cone beam computed tomography (CBCT) images taken from patients with different skeletal patterns.

Material-Methods: This study was conducted on CBCT images of Class I, Class II and Class III patients. Each group includes 30 patients between 18 and 50 years old. The location was determined by three measurements from the lingula to: the coronoid notch, the gonion, and the sigmoid notch. The comparisons of gender and skeletal patterns were then evaluated by statistical analysis.

Results: Statistically, the mean distance of the ML from the coronoid notch in skeletal Class III patients was found to be greater than Class I and Class II patients The mean distance between the gonion and the ML was not found statistically significant in different skeletal patterns. In all groups, the mean distance between the ML and the gonion was statistically greater in males. The mean distance from sigmoid notch to ML was significantly greater in Class III patients compared to the other skeletal patterns ($p<0.05$).

Conclusions: The mandibular lingula is an important landmark for mandibular ramus surgery and IANB. Our study showed that this position may vary according to different skeletal patterns. The results may therefore help surgeons increase success rates of IANB and reduce complications when performing mandibular ramus osteotomies.

Keywords: Angle Classification, Cone-Beam Computed Tomography, Mandibular Lingula

OP-113
Angular Changes of the Ramus Following SSRO in Mandibular Asymmetry Patients

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Orthognathic surgeries are performed to correct maxillomandibular discrepancies. Individuals with facial asymmetry commonly go through orthognathic surgeries to establish facial harmony with better phonation and occlusal functions.

Among the orthognathic interventions towards the mandible, sagittal split ramus osteotomies are frequently preferred and have many advantages such as obtaining airway space, condylar positioning, aesthetics, recovery time and ease of rigid fixation. On the other hand, complications like inferior alveolar nerve damage, bad split, bone resorption, a slight shift of occlusion may be encountered and this technique may be insufficient to correct severe skeletal deformities. Bone interferences are a possible outcome during the facial asymmetry corrective repositioning of the mandible with SSRO. This situation may change the axis of the mandibular ramus and influence the treatment results.

The aim of this study is to evaluate the effect of sagittal split ramus osteotomies to the lateral and frontal inclination of ramus following SSRO performed to correct the mandibular asymmetry.

Keywords: SSRO, facial asymmetry, ramus inclination

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OP-114
Localization and Anatomical Features of Mental Foramen: Panoramic Radiography vs. Cone Beam Computed Tomography

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Objective: Mental foramen is an essential landmark of the mandible for oral surgery procedures and local anesthesia administration. Determination of exact localization and morphological features of mental foramen is critical to prevent complications and gain successful anesthesia. The aim of this study is to compare panoramic radiography (OPG) and cone beam computed tomography (CBCT) in terms of localization, size and shape of the foramen.

Materials-Methods: A total number of 183 mental foramens were analyzed in both OPG and CBCT scans. Anteroposterior position (AP), superoinferior (SI) position and shape of mental foramens were classified and evaluated. The height and width of the mental foramens were also measured.

Results: A statistically significant moderate level of agreement was obtained between OPG-AP and CBCT-AP positions; and also between OPG-SI and CBCT-SI positions (Kappa: 0.559, $p<0.05$; Kappa: 0.546, $p<0.05$). There was no statistically significant difference between the medians of height of mental foramen in OPG and CBCT ($p>0.05$). A significant difference was found between the medians of width of mental foramen in OPG and CBCT ($p=0.026$). A statistically significant slight level of agreement was obtained between the shape of mental foramens in OPG and CBCT (Kappa: 0.193, $p<0.05$).

Conclusion: The assessments from OPG are largely consistent with the data obtained from CBCT.

Keywords: panoramic radiography, cbct, mental foramen

OP-115
Does the Position of the Mandibular Third Molar Have an Effect on the Lingual Bone Morphology? : A Cone Beam Computed Tomography Evaluation

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Objective: Impacted third molar extraction is the most common oral surgery procedure which is also associated with some risks and possible complications. Among them, lingual plate fracture, migration of the root tip and lingual nerve injury are rare but severe complications. This study aims to evaluate the relationship between lingual bone morphology and the position of the impacted third molar.

Materials-Methods: CBCT scans of 120 mandibular third molar teeth were evaluated retrospectively. Impacted third molars were sorted according to Winter's and Pell&Gregory's classification. In addition, lingual plate morphology at the level of root apex and the topographic relationship between root apex of impacted mandibular third molar and lingual plate were evaluated.

Results: There were no statistically significant relationships between the position of root apex and available space concerning ascending mandibular ramus, depth of impaction and angulation ($p>0.05$). Statistically significant differences were found between lingual plate morphology and available space concerning ascending mandibular ramus, depth of impaction and angulation ($p=0.02$, $p=0.008$, $p=0.001$).

Conclusion: The position of the impacted third molar does not increase the risk of complications related to the lingual plate. To prevent the possibility of lingual plate fracture and lingual nerve injury, the clinician should take a patient-based CBCT scan and precautions intraoperatively.

Keywords: impacted third molar, lingual morphology, radiographic evaluation

OP-117
Evaluation of the Efficacy of Low Level Laser Acupuncture Treatment on Gag Reflex Before Tooth Extraction

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Objective: The aim of this study was to evaluate reduction of the gag reflex by low-level laser therapy.

Materials & Methods: In this prospective study, 20 patients who applied to our clinic for tooth extraction and had gag reflex were included. Gag reflex severity was evaluated with the gonadosomatic index (GSI) before the treatment and these measurements were renewed after the procedure. Before dental treatment, low-level laser therapy was applied to specific acupuncture points (PC6 - CV24). A diode laser (Solase Dental Diode Laser) with a continuous wavelength of 976 nm was used in 400 micron fiber. The laser probe (0.8 cm in diameter) was placed on the target area and applied for 10 seconds with an energy density of 200 mW (0.2 W). (energy density = 4 J / cm²)

Results: Of the 20 patients, 10 were female and 10 were male (mean age: 45.89±10.54 years). According to the GSI scale, the mean G decreased from 3.33 to 1.28 after laser application. It has been reported that the incidence of gag reflex was significantly reduced in patients who underwent acupuncture through low-level laser therapy. ($p < 0.05$).

Conclusion: Acupuncture treatment with low-level laser is an easy and effective method to reduce the gag reflex in patients.

Keywords: gag reflex, low level laser therapy, acupuncture

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POSTER PRESENTATIONS

PP-01

Distribution of CBCT Findings of Osteoarthritis By Age And Gender Groups

Nida Geçkil
Şanlıurfa Ağız ve Diş Sağlığı Hastanesi

Objective: The aim of this study is to evaluate the presence and findings of osteoarthritis based on CBCT images according to different age and gender groups.

Materials-Methods: CBCT images of 764 temporomandibular joints (TMJ) were analyzed retrospectively. Osteoarthritis (OA) findings were grouped as normal or flattened, erosion, sclerosis, subchondral cyst, and osteophyte. These groups were evaluated separately for both sexes and for five separate decades.

Results: While pseudocyst and flattening among osteoarthritis findings were more common in men, sclerosis was significantly more common in women ($p<0.05$). Osteoarthritis findings were rarely observed in the 20-29 age group. While erosion and flattening were significantly higher in the 60-69 age group, sclerosis was observed at a higher rate in the 50-59 age group ($p<0.05$).

Conclusion: In women, sclerosis as a sign of OA, and in men, flattening is in the foreground. While the frequency of normal articular eminence decreased regularly with age, flattening, erosion and sclerosis were observed as signs of OA with an increasing rate in advanced age.

Keywords: Osteoarthritis, Computed Beam CT, Temporomandibuler joint

figure 1

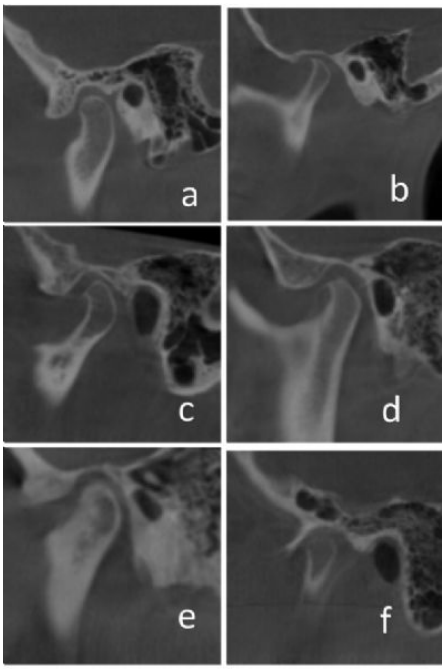

Figure 1. Sagittal cone beam computed tomography images of osteoartrit findings. a. Normal b. Osteopyte c. Erosion d. Flattening e. Subchondral Sclerosis f. Pseudocyst

table 1

OA	Female	Male	Total	*p* value
Normal	292	165	457	
	57,50%	64,50%	59,80%	0.064[a]
Osteofit	69	32	101	
	13,60%	12,50%	13,20%	0.677[a]
Pseudocyst	-	3	3	
		1,20%	0,40%	**0.037*[b]**
Erosion	45	24	69	
	8,90%	9,40%	9,00%	0.814[a]
Flattening	30	32	62	
	5,90%	12,50%	8,10%	**0.002*[a]**
Sclerosis	72	-	72	
	14,20%		9,40%	**0.000*[a]**
Total	508	256	764	
	100,00%	100,00%	100,00%	

[a] Chi-square test (*p<0.05). [b] Fisher's Exact test (* p<0.05).

The distribution of osteosclerosis findings by gender

table 2

OA	20-29	30-39	40-49	50-59	60-69	Total	*p* value
Normal	177	141	106	30	3	457	
	86,80%	78,30%	57,00%	21,90%	5,30%	59,80%	**0.000*[a]**
Osteofit	21	24	26	24	6	101	
	10,30%	13,30%	14,00%	17,50%	10,50%	13,20%	0.382[a]
Pseudocyst	3	-	-	-	-	3	
	1,50%					0,40%	0.074[b]
Erosion	-	6	21	18	24	69	
		3,30%	11,30%	13,10%	42,10%	9,00%	**0.000*[a]**
Flattening	-	3	6	35	18	62	
		1,70%	3,20%	25,50%	31,60%	8,10%	**0.000*[a]**
Sclerosis	3	6	27	30	6	72	
	1,50%	3,30%	14,50%	21,90%	10,50%	9,40%	**0.000*[a]**
Total	204	180	186	137	57	764	
	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	

[a] Chi-square test (*p<0.05). [b] Fisher's Exact test (* p<0.05).

Distribution of osteosclerosis findings by age

PP-02
Clinical evaluation of secondary reconstructive procedures in the cleft patients

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Cleft lip and palate is the most common congenital deformity affecting craniofacial structures. Orofacial clefts have great impact on the quality of life which includes aesthetics, function, psychological impact, dental development and facial growth. Therefore cleft lip and palate continues to be a significant public problem. The reported worldwide incidence is 1in 800 live births. Unfortunately surgical repair of these deformities can cause some secondary problems. A wide variety of deformities can occur following repair of the cleft lip and palate. Lip deformities include absent, deficient or deformed Cupid's bow, short, long, tight or wide lip, vermilion deficiencies, philtrum deformities and scar deformities. Palate deformities include oronasal fistulas, palatal fistulas and residual alveolar clefts. Furthermore, different nasal deformities, maxillary and velopharyngeal insufficiencies can be associated with these deformities. To correct these deformities some secondary surgical procedures must be performed in these patients.

In this report, clinical evaluation of secondary reconstructive procedures in 27 cleft patients are presented. The deformities including lip, palate and alveolus were treated successfully with secondary reconstructive procedures. The most common procedure was grafting from iliac bone in alveolar clefts. In the light of these patients and the data of literature secondary surgical procedures in the cleft patients are discussed.

Keywords: Cleft lip; cleft palate; cleft surgery; secondary cleft surgery

PP-03
Comparison of clinical and MRI findings in patients with unilateral and bilateral joint hypermobility

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Objective: Temporomandibular joint (TMJ) hypermobility is defined as hyper-translation of the mandibular condyle to the anterior and superior aspect of the articular eminence during the opening of the mouth. TMJ hypermobility may trigger dysfunction, increased degeneration, and disc displacements. This study aimed to compare clinical findings and MRI findings in patients with unilateral and bilateral joint hypermobility.

Materials-Methods: A total of 16 patients (32 TMJs), 9 of whom (18 TMJs) had bilateral joint hypermobility defined as the group I, and 7 patients (14 TMJs) who had unilateral joint hypermobility defined as group II were included in the study. Clinical findings were recorded as pain and maximum mouth opening (MMO). The pain was evaluated using a visual analog scale (VAS). Internal derangements and condyle morphology were examined on magnetic resonance imaging (MRI).

Results: The mean MMO range was higher in group I, as expected. On the other hand, VAS value, effusion, and condyle erosion were found to be more significant in group II. Conclusion: Internal derangements and degenerative changes may accompany patients with joint hypermobility. Unilateral or bilateral hypertranslational movement of the mandibular condyle may cause an increase in the severity of internal derangement with the effect of trauma on TMJ. More comprehensive studies are needed on this subject in patients with TMJ hypermobility.

Keywords: Temporomandibular joint hypermobility, dislocation, subluxation

PP-04
The Impact of Traffic Law Enforcement Regulations on Number and Severity of Maxillofacial Injuries

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Objective: Road traffic accidents (RTAs) are the main cause of facial injuries in Oman. This study aimed to assess the effectiveness of the new traffic law enforcement regulations (TLERs) on the number and severity of maxillofacial injuries in Oman.

Materials-Methods: A retrospective longitudinal analytic study was conducted at three tertiary care hospitals in Muscat, Oman. All patients with RTA-related maxillofacial injuries from the period of January 2005 to December 2009 (before the new TLERs) and the period of January 2015 to December 2019 (after the new TLERs) were included in the study

Results: A total of 1127 patients were included in the study. Of these, 646 (57.3%) patients sustained RTA-related maxillofacial injuries before the implementation of the new TLERs compared to 481 (42.7%) after the introduction of TLERs. There was no significant difference in gender sustained injuries between the two study periods. The incidence of injury before the implementation of the TLERs was 22.7 per 100,000 population, which then reduced significantly to 11 per 100,000 after the new TLERs. Overall, there was a significant reduction in the mean facial injury severity score from 3.2 to 2.3 before and after the implementation of the new TLERs, respectively.

Conclusion: The findings of this study indicate that the newly introduced TLERs have resulted in a reduction in the number and severity of RTA-related maxillofacial injuries. Continuous improvement and reinforcement of TLERs will further help to reduce the burden of these injuries.

Keywords: Law Enforcement; Traffic Accidents; Maxillofacial Injuries; Injury Severity Score; Oman

Figure 1 and 2

Figure 1: RTA-related maxillofacial injuries before and after the implementation of the new traffic law enforcement regulations.

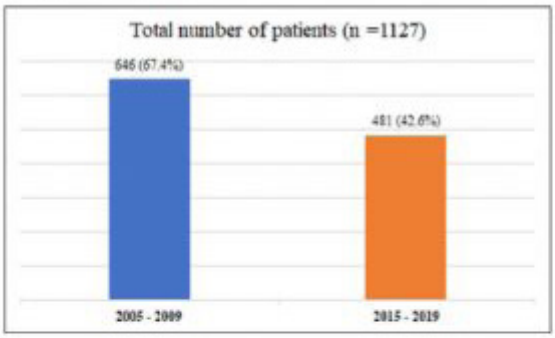

Figure 2: Facial injury severity score group categorization before and after the implementation of the new traffic law enforcement regulations.

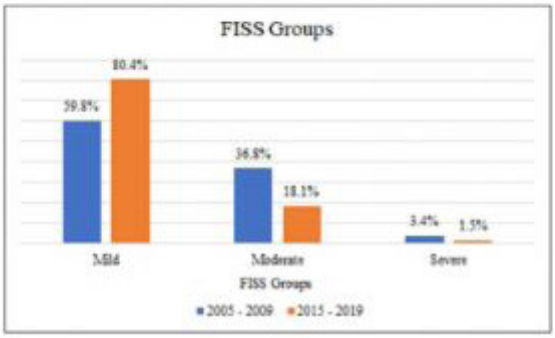

Figure 1: RTA-related maxillofacial injuries before and after the implementation of the new traffic law enforcement regulations. Figure 2: Facial injury severity score group categorization before and after the implementation of the new traffic law enforcement regulations.

PP-05
The Effect of Saline Irrigation at Different Temperatures on Pain, Edema, and Trismus After Impacted Third Molar Surgery: A Prospective, Randomized, Split-Mouth, Clinical Trial

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Objective: Lower-impacted third-molar surgery is a very common oral-maxillofacial surgical procedure, which has complications such as facial swelling, pain and trismus. This clinical trial aimed to compare the intensity of postoperative morbidity (pain, facial swelling, and trismus) following the third molar surgery performed using saline irrigation at different temperatures (4°C,10°C,25°C).

Materials-Methods: This study was conducted among 48 patients who had bilaterally asymptomatic mandibular third molars. Patients were randomly allocated into two groups (n=24) according to the temperature of the saline used (4°C or 10°C). In each patient, one impacted third molar was determined as the test group (4°C or 10°C saline irrigation), and the other impacted third molar as a control group (25°C saline irrigation). Trismus and facial swelling were evaluated on the 1st, 3th, and 7th days postoperatively. Pain perception by Visual Analog Scale(VAS) and total number of analgesics taken during the postoperative 7 days were recorded. Also,the duration of operations was recorded.

Results: The duration of operations was similar(P=0.051). Both test groups(4°C and 10°C) had lower VAS values and the number of analgesics taken than control groups (25°C,P<0.001). Also, the 4°C test group showed lower VAS values and the number of analgesics taken than the 10°C test group(P<0.001). The lowest trismus and facial swelling values were detected in the 4°C test group at all time points (P<0.001). Trismus and facial swelling for the 10°C test group was lower than the control groups (P<0.001 at all time points except trismus at day 1).

Conclusion: In the impacted third molar surgery, the use of cooled saline irrigation during bone removal may be a simple, inexpensive, and effective method for reducing early postoperative complaints.

Keywords: Third molar surgery, cooled salin, irrigation temperature

Table 1. Demographic features of the patients

	Group 1 Test (4°C)	Group 1 Control (25°C)	Group 2 Test (10°C)	Group 2 Control (25°C)	Total	P
Age	23.4 ± 3.3a	23.4 ± 3.3a	25.8 ± 4.0b	25.8 ± 4.0b	24.6 ± 3.8	0.019*
	Group 1		Group 2			
Gender						
Female	14(58.3)		14(58.3)		28(58.3)	1.000**
Male	10(41.7)		10(41.7)		20(41.7)	

** Chi-square test, **one-way analysis of variance. Different letters indicate statistically significant difference*

Table 2. Comparison of VAS scores and analgesics taken between the groups

	Group 1 Test (4°C)	Group 1 Control (25°C)	Group 2 Test (10°C)	Group 2 Control (25°C)	P
Duration of operation (minutes)	16.0 (15.0 - 8.0)	16.0 (15.0 - 17.0)	17.0 (16.5 - 19.0)	18.0 (16.0 - 19.0)	0.051*
VAS scores	4.0 (3.0 - 6.0)a	13.0 (10.0 - 16.0)b	8.0 (7.0 - 10.0)c	15.5 (13.5 - 18.0)b	<0.001**
Number of analgesics taken	0.0 (0.0 - 1.0)a	5.5 (4.0 - 7.0)c	3.0 (2.0 - 3.5)b	4.0 (3.0 - 6.0)bc	<0.001**

** One-way analysis of variance, ** Kruskal-Wallis test. Different letters indicate statistically significant difference.*

Table 3. Comparison of trismus severity and facial swelling between the groups

		Group 1 Test (4°C)	Group 1 Control (25°C)	Group 2 Test (10°C)	Group 2 Control (25°C)	P*
Trismus(mm)						
	Day 1	3,0 (2,0 - 4,0)aA	10,0 (7,5 - 10,0)bA	6,5 (5,5 - 8,0)bA	8,0 (6,5 - 8,0)bA	<0,001
	Day 3	2,5 (2,0 - 4,0)bA	9,5 (7,5 - 12,0)aA	4,0 (3,5 - 6,0)bB	7,0 (6,0 - 8,5)aAB	<0,001
	Day 7	1,0 (0,0 - 2,0)bB	7,5 (4,5 - 10,0)aB	2,0 (1,0 - 4,0)bC	6,5 (4,0 - 8,0)aB	<0,001
	P	<0,001	<0,001	<0,001	<0,007	
Swelling (mm)						
	Day 1	2,0 (0,0 - 4,0)cB	10,0 (4,0 - 15,0)abA	(4,0 - 8,5)bB	14,0 (10,5 - 17,0)aB	<0,001
	Day 3	5,5 (2,0 - 7,5)bA	28,5 (21,0 - 33,0)aB	13,0 (12,0 - 15,5)cA	22,5 (20,0 - 27,5)aA	<0,001
	Day 7	2,0 (0,0 - 2,5)bB	18,0 (11,0 - 27,0)aC	6,5 (5,5 - 8,0)cB	16,0 (11,5 - 21,5)aB	<0,001
	P*	<0,001	<0,001	<0,001	<0,001	

**Kruskal-Wallis test. Different letters indicate statistically significant difference horizontally and vertically.*

PP-07
Biopsy After Impacted Tooth Extraction; When? A Case Report

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Objective: Extraction of impacted teeth is a frequently performed procedure in maxillofacial surgery clinics. Pathological changes such as tumors and cysts may develop in the tissues around these teeth. Although these lesions may present symptoms such as pain, swelling and asymmetry. These lesions can also progress asymptomatically.

Case: A 71-year-old male patient was referred to our clinic for impacted tooth. There was no history of systemic disease, medication or smoking. A first-degree relative had a history of cancer. The patient's tooth 48 was extracted under local anesthesia. The capsule of the tooth and the surrounding inflamed soft tissue were sent for pathological examination. As a result of the histopathological examination, cells stained with plasma cell markers showed both kappa and lambda positivity and were interpreted as plasma cell gingivitis. As a result of serum protein electrophoresis IgG was found to be high. In the light of this information, the patient has been followed up regularly for one year by our clinic and hematology department.

Conclusion: Even in the absence of clinical or radiographic evidence of disease, inflammatory, cystic, or neoplastic tumors may develop in the tissue surrounding the third molar. Difficulties in determining what can be considered normal or pathological create complications for diagnosis. We believe that every tissue taken from the oral mucosa needs to be should be sent for histological examination, especially in patients with risk factors.

Keywords: oral diseases, oral pathology, biopsy

PP-08
Mandible Fracture Following Surgical Removal of Impacted Third Molar

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Objective: Impacted tooth removal is one of the most common procedures performed in oral surgery. Complications of these operations include pain, swelling, bleeding, infection, nerve damage. Mandible fracture are seen rarely. This case report includes a fracture of the mandible after tooth extraction performed by a non-oral and maxillofacial surgeon in another clinic.

Case: A 57-year-old male patient was referred to our clinic because of a left mandibular angle fracture. There was no systemic disease or drug history. The patient reported that two days ago a dentist had extracted the 37 and 38 horizontally impacted teeth and a cracking sound came from his chin while eating the day before. In the clinical examination, the fracture line was felt intraoral palpation. The occlusion was stable. Radiologically, a large bone defect was seen. The fracture line was reduced under general anesthesia. No intra or postoperative complications were encountered.

Conclusion: The reasons for susceptibility to mandible fracture include decrease in bone elasticity as a result of increasing age, complete bone retention of the tooth, weakening of the mandible by the volume of bone removed during the operation, and lesions around the tooth.The surgical experience of the surgeon is one of the most important factors. We are of the opinion that oral surgical procedures especially with the risk of complications should be performed by oral and maxillofacial surgeons who are professional in the field.

Keywords: maxillofacial trauma, tooth removal, mandible fracture

PP-09
Implant Fracture After Conventional Loading and Changing the Treatment Planning

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Objective: In this case, it is aimed to explain the removal of an implant that is fractured in the neck region and the change of the treatment plan.

Case: The patient applied to our clinic in April 2011 with a complaint of edentulism, it was planned to have 2 implants. After the osteointegration process, 4 unit cemented fixed prosthesis on the implants were made. In the patient's history taken at the controls in 2019, he stated that he felt that the fixed prosthesis was moving from time to time, but he did not care. The patient came to the clinic 2 years later with a fixed prosthesis in his hand. In the clinical examination, it was seen that there was no problem in the gingiva or the adjacent tooth. In the radiographic examination, it was noticed that the lateral wall of the implant neck was fractured. Following the failure of the existing implant, it was decided to replace it with two implants and to make a screwed fixed prosthesis on three implants. In this way, it was considered that the problems that may be encountered in the future stages could reduce the need for surgery, and it was concluded that a better distribution of the forces on the bridge would be achieved.

Conclusion: Even if a good occlusion and centric relationship is achieved, it should not be overlooked that interim controls, patient communication, early diagnosis and screw restorations will provide the physician with the opportunity to solve the problems.

Keywords: implant fail, implant fracture

PP-10]
A giant complex odontoma in posterior mandibula: a case report and literatur review

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Objective: Odontomas which are considered as hamartomas are the most common types of odontogenic tumors. It is generally reported that its diameter does not exceed 3cm. Some authors have defined odontomas with a diameter of more than 3cm as giant odontomas. Jong Chan et al showed that 11 cases with large/giant odontomas were revealed since 2010 in the literature. The purpose of this article is to highlight the notable presentation of complex odontoma with a wide expansion resulting with extraoral asymmetry in a young patient.

Case: As a result of the radiographic examination of a 17-year-old woman who applied to the another hospital with the complaint of tooth deficiency in the molar region of the right mandible, a large lesion was detected in the relevant region. CBCT examination was showed that the complex odontoma lesion which prevents eruption of the first lower molar has a volume of 23.94cm3 and a diameter of 5.2cm. The lesion was taken out completely by preserving the cortical bone borders under general anesthesia. Intermaxillary fixation was applied for 3 weeks to prevent post-operative fracture formation. Successful bone healing was observed radiologically 3 months after surgery.

Conclusion: Odontomas are the most common odontogenic tumors, but the lesions reaching such large sizes in the literature are rare. When the dimensions are taken into consideration, treatment options may be opted meticulously. Thanks to conservative treatment with intermaxillary fixation, cortical bone borders may be preserved efficiently. Thus, the drawbacks of the resection are hindered.

Keywords: oral surgery, giant complex odontoma, pathology

PP-11
Ectopic tooth in the ramus: A case report

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Objective: Ectopic mandibular third molar is a rare clinical condition. Few case reports have been reported in the literature regarding ectopic third molars located in the mandibular ramus. Ectopic mandibular third molars are usually asymptomatic or associated with symptoms such as pain, swelling, trismus, and purulent discharge from intraoral or extraoral fistulas. If these teeth are symptomatic, they should be surgically removed.

Case: A 31-year-old female patient resorted to our clinic with complaints of intraoral discharge and pain in the mandible. It was observed that there was an intraoral fistula in the ascending ramus in the intraoral examination. Panoramic radiography showed a third molar located left side of the ascending ramus of the mandible (Figure 1). A cone-beam computerized tomography scan showed the tooth is close to the lingual cortex of the ascending ramus and contact with the mandibular canal. Surgical removal was performed under general anaesthesia using an intraoral approach. İt was removed in one piece by elevation with a wire-screw attached for this reason the third molar is located close to the lingual cortex (Figure 2).

Conclusion: Ectopic mandibular third molars are rare and usually discovered because of the clinical symptoms. The treatment method is the surgical removal of these teeth. Considering the position of the teeth, a surgical approach should be applied that will cause minimal trauma to the patients.

Keywords: Ectopic tooth, Mandible, Third molar

Figure 1

Pre operative panoramic radiograph

Figure 2

Removal of an ectopic third molar tooth by holding it with a wire-screw

PP-12
A Rare Case Report And Review Of The Literature: Partial Horner's Syndrome And Unusual Neurological Complications After Inferior Alveolar Nerve Block

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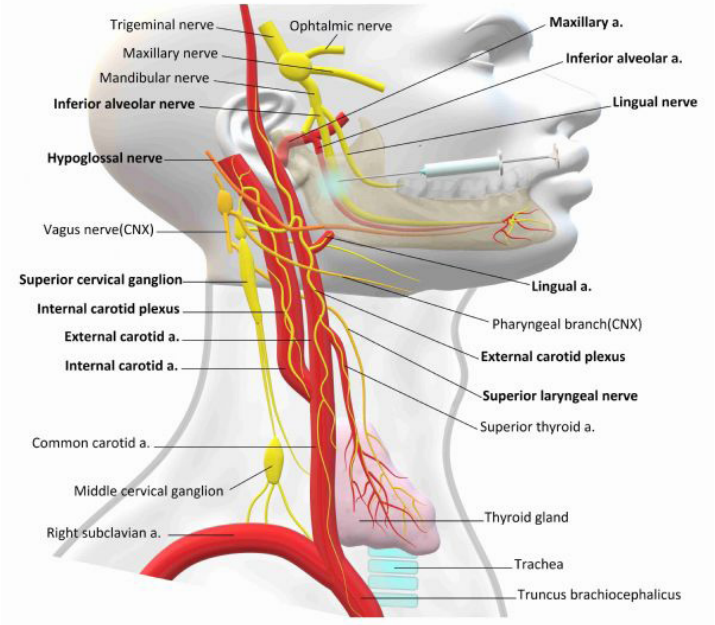
Objective: Inferior Alveolar Nerve Block (IANB) is frequently applied in mandibular dental procedures. Neurological complications develop very rarely due to IANB, and most of the complications are temporary.

Case: We present a 79 year old man with partial Horner's syndrome, hyperlacrimation, aphonia, dysphagia, severe cough, and foreign body sensation in the throat after IANB. All symptoms were disappeared three hours after local anesthetic injection.

Conclusion: It was aimed to investigate the underlying pathophysiological causes of complications together with clinical and anatomical data. Neuronal blockade of carotid plexus, nervus laryngeus superior and inferior might develop after IANB. In addition, it is critical to accurately determine the IANB injection site in obese and thick-short neck patients.

Keywords: inferior alveolar nerve block, partial Horner's syndrome, aphonia

IANB injection site associated nerves and carotid plexus



PP-13
Peri-implant Osteonecrosis of a Patient with Type 2 Diabetes without a History of Antiresorptive Therapy

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Hacettepe University, Department of Oral and Maxillofacial Surgery

Peri-implant diseases that are inflammatory lesions in the tissues around dental implants constitute one of the major challenges in oral surgery. Local and systemic factors have been shown to substantially impact the peri-implant tissues. Hyperglycemia may be a potentially important factor in the development of biological complications of dental implants, particularly as seen in poorly controlled diabetes. Diabetes mellitus (DM) is associated with several microvascular and macrovascular complications. Since the oral cavity is highly vascularized and innervated, oral complications may also be encountered. Despite limited evidence, it is suggested that poorly controlled diabetes increases the risk for peri-implant disease. The chronic inflammatory response associated with diabetes predisposes to impaired bone healing and therefore to the development of osteonecrosis of the jaw. Osteonecrosis of the jaw (ONJ) is a rare and severe necrotic bone disease reflecting a compromise in the body's osseous healing mechanisms. Generally, antiresorptive/antiangiogenic medications and head and neck radiotherapy have been suggested to be associated with the occurrence of ONJ. Diabetes mellitus is another significant systemic factor that likely affects the pathogenesis of ONJ. Osteonecrosis around dental implants in the mandible posterior region in a 64-year-old male patient with type-2 uncontrolled diabetes who had no additional history of cancer or antiresorptive chemotherapy/radiotherapy will be presented.

Keywords: diabetes mellitus, jaw osteonecrosis, peri-implant disease

PP-14
Donor site infection in the mandibular symphysis: A case report

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Kütahya Health Sciences University, Faculty of Dentistry, Oral and Maxillofacial Surgery

Objective: The mandibular symphysis region is preferred a donor site because it is easy to access the region and sufficient bone can be obtained for enlarging large defects in obtaining autogenous bone grafts. However, complications such as infection, necrosis in neighboring teeth and paresthesia may be encountered. In this case report, infection following autogenous graft harvested in the symphysis region is described.

Case: A 51-year-old male patient resorted to our clinic with complaints of intraoral discharge in the mandibular anterior region. In the clinical examination, intraoral fistulas were observed in in the mandibular anterior mucosa. In the radiological examination, radiolucent lesions were detected at the apex of teeth 43 and 33. It was determined that the root tips of teeth 33 and 43 were cut irregularly. In the anamnesis taken from the patient, it was learned that bone graft was harvested from this region during implant surgery in an external center. After the endodontic treatment of teeth 43 and 33, infected donor areas were exposed under local anesthesia and the lesions were excised. Apical resection was performed on teeth 43 and 33.

Conclusion: To avoid complications when removing bone from the mandibular symphysis, a 5 mm margin should be left under the tips of the roots of the anterior teeth.

Keywords: symphysis graft, infection, complication

PP-15
Traumatic Displacement of Central Maxillary Incisor into Nasal Cavity

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Ondokuz Mayıs Üniversitesi Diş Hekimliği Fakültesi Ağız Diş ve Çene Cerrahidi AB Dalı, Samsun

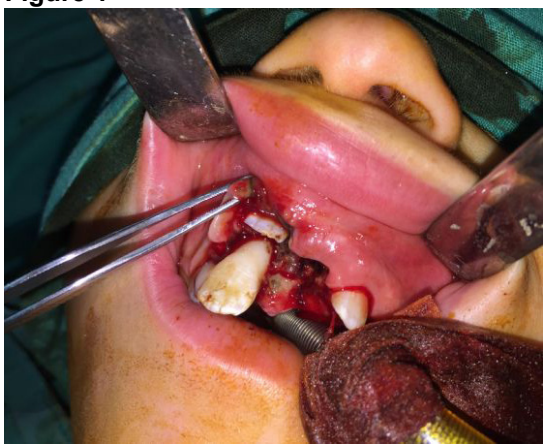
Objective: The displacement of maxillary incisor teeth deep into the alveolar bone and/or into nasal cavity has been one of the most serious dental injuries. The purpose of this paper is to describe a rare case with maxillary incisor's traumatic displacement into the nasal cavity.

Case: A 9-year-old boy fell from a swing and hit his face on the ground. Intraoral examination was revealed that the avulsed left maxillary central incisor tooth had been replaced instead of right missing central tooth as a result of careless inspection in private clinic by a dentist before. Computed tomography showed a dislocated right maxillary incisor tooth into the nasal cavity and alveolar fracture was observed. The left maxillary central incisor was removed because it was completely loose with no more sufficient alveolar bone to replant the tooth in place, and then the missing right maxillary central incisor was easily replaced from the floor of the right nostril and brought to the occlusal level passively. Maxillary anterior teeth were splinted. Endodontic treatment was performed on right maxllary central incisor. After 2-months the splint was removed and the patient's postoperative course was uneventful.

Conclusion: It is important to consult to dental specialist, such as oral surgeon in the initial assessment of dental trauma in order to identify how many and which teeth might be missing after dental trauma and to correctly reposition the avulsed teeth when possible.

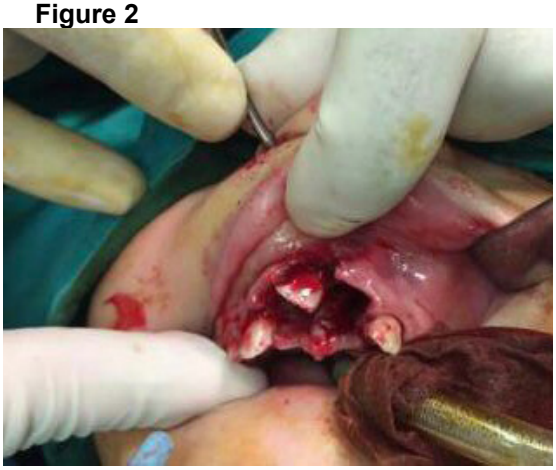
Keywords: Trauma, dental trauma

Figure 1



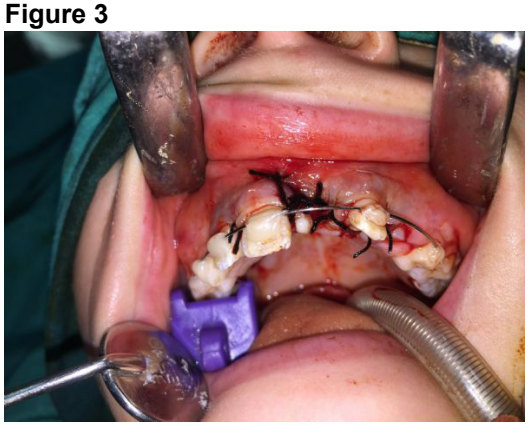
Pre-operative intraoral view. Replaced left maxillary central incisor tooth and dislocated right maxillary incisor tooth into the nasal cavity

Figure 2



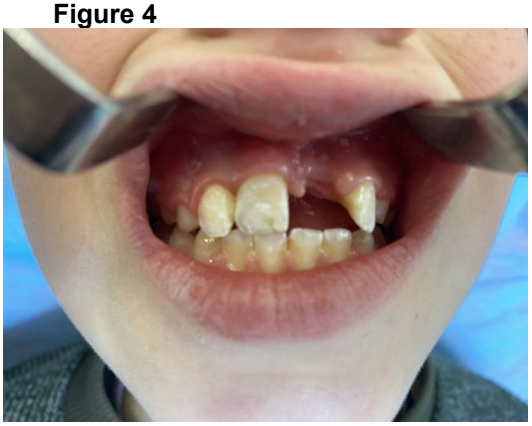
Replacing of the right maxillary central incisor from the floor of the right nostril

Figure 3



Postoperative operation area.
Maxillary anterior teeth were splinted.

Figure 4



Postoperative 2 months.

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PP-16
A large ossifying fibroma of the mandible

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Objective: Ossifying fibroma (OF) is a benign bone neoplasm characterized by excessive growth and bone destruction, which is considered a "fibro-osseous lesion" type. 70-90% of cases occur in the posterior region of the mandible. It is more common in women and the highest incidence is in the 3rd and 4th decades. It can be seen radiologically as unilocular or multilocular. The treatment is usually enucleation and curettage, but surgical resection is required for larger lesions. In this presentation, we aimed to present a case of large OF in the mandible of a female patient.

Case: A 32-year-old, systemically healthy female patient presented with painless swelling and paresthesia on the left side of her face. Extraoral examination revealed a firm swelling on the lower left side of the mandible. In intraoral examination, bicortical expansion extending from the second premolar to the angulus was detected. Panoramic radiography showed multilocular radiolucent areas with well-defined borders in the left posterior mandible. CBCT taken for further examination revealed a mass of approximately 6x4x3 cm with both buccal and lingual cortex expansion. Incisional biopsy for definitive diagnosis showed a benign bone lesion suggestive of the OF. En-bloc resection was performed in the treatment. No recurrence was observed in the 4-year follow-up.

Conclusion: The OF cases can reach large sizes in the jaws without symptoms for a long time and may require resection. Therefore, early diagnosis and appropriate treatment are very important. Since recurrences may occur up to 10 years following treatment, patients should be followed for a long time.

Keywords: ossifying fibroma, mandible

PP-17
Squamous Cell Carcinoma İnvolving Hard Palate and Posterior Maxillary Alveolar Ridge

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[2]*Ondokuz Mayıs University, Faculty of Medicine, Department of Pathology, Samsun, Turkey*

Objective: Squamous cell carcinoma (SCC) constitutes the vast majority of malignancies of the oral cavity with varying symptoms, routes of spread and prognosis. The purpose of this study is to present a case with squamous cell carcinoma in the posterior maxillar region.

Case: A 75 year old female was admitted to the department of Oral And Maxillofacial Surgery in Ondokuz Mayıs Univesity Dental Faculty with an ulcerative lesion in the palate and alveolar ridge in maxilla. The patient reported that the lesion was first seen 4 years ago only in posterior part of the palate and expanded to the alveoler ridge during the last 6 months. Intraoral examination revealed non painful, ulcerative lesion with erythematous characteristics. The patient's sytemic anamnesis include diabetes (type II), hypertension and hypothyroidism. Cone beam tomography examination revealed bone resorption on the involved area. By considering the clinical and radiographic findings, preliminary diagnosis was verrucous leukoplaki and SCC. Incisional biopsy under local anesthesia was performed and the specimen was submitted for histopathological examination. The histopathological examination of the excised specimen revealed tumor cells consisting of atypical squamous epithelial cells with enlarged nuclei, which had invaded the submucosal connective tissue and bone. These features indicated SCC. The patient was referred to the otolaryngology department for further surgical treatment.

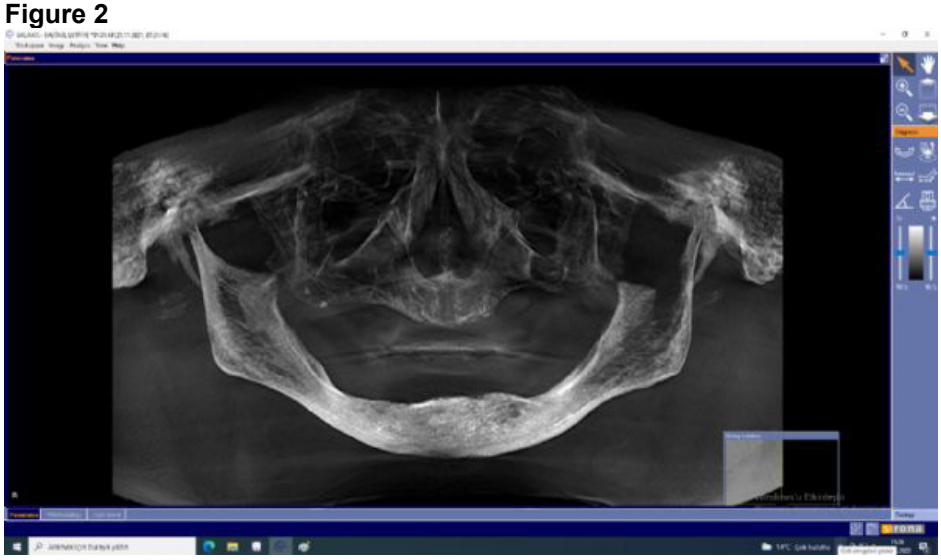
Conclusion: Dentists have an important role in the diagnosis of such malignant lesions due to their intraoral location. Early diagnosis of malignancies is very important for the prognosis of the malign lesion.

Keywords: Malign lesion, squamous cell carcinoma

Figure 1

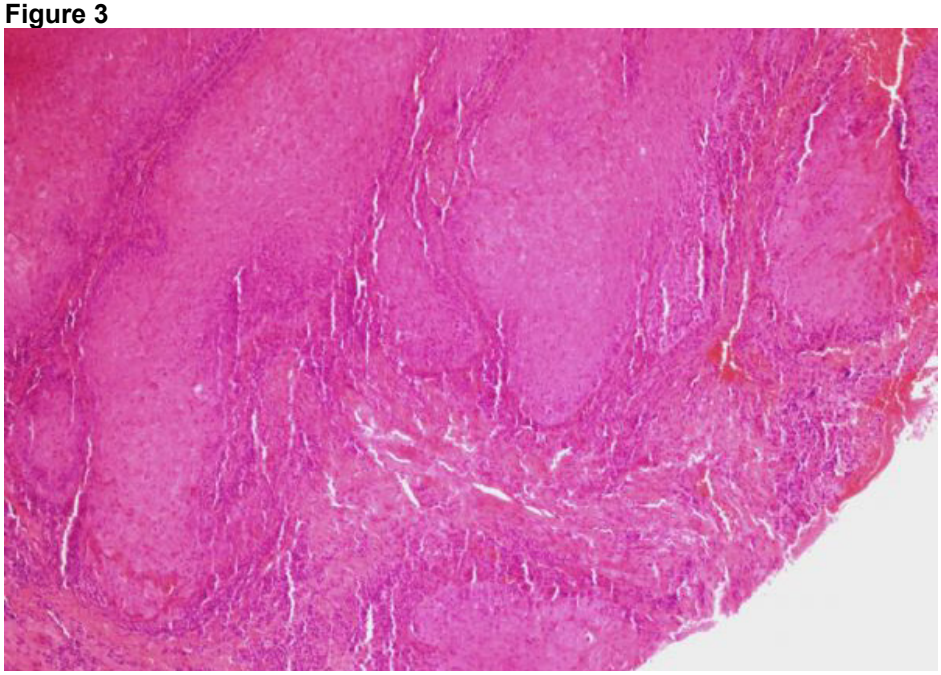
Intraoral picture showing lesion on the left side of the posteior maxillary region

Figure 2



Panoramic section of cone beam tomography

Figure 3



Histopathologic picture showing squamous cell islands infiltrating the subepithelial space (HEX100)

PP-18
Conservative management of a dentigerous cyst associated with mandibular impacted second molar tooth

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[2]*Department of Orthodontics, Faculty of Dentistry, Necmettin Erbakan University, Konya, Türkiye*
[3]*Department of Pathology, Meram Medical Faculty, Necmettin Erbakan University, Konya, Türkiye*

Objective: In this case, it was aimed to treat the dentigerous cyst located around the unerupted permanent mandibular second molar tooth with decompression and to erupt this tooth with orthodontic treatment.

Case: A 15-year-old girl presented with a complaint of swelling on the posterior region of the right mandible. A well-circumscribed radiolucent lesion was detected around the crown of the unerupted second molar in the panoramic radiography. In the CBCT, it was observed that the tooth placed in the buccolingual direction and cortical expansion on the buccal side. The size of the radiolucent area was determined as 18x14x12 mm. In addition, resorption was observed in the cortical wall of the mandibular canal. However, there was no resorption in the tooth roots. Incisional biopsy for definitive diagnosis revealed a cystic lesion suggestive of a dentigerous cyst. During the biopsy procedure, the impacted third molar was extracted and a window was opened for decompression. The cyst cavity was dressed once a week for 3 months. Then, the tooth was erupted by using an anchor screw placed in the ramus area. After a 1-year follow-up, the area was completely healed and the cavity was filled with bone. There was no need for a second surgical procedure.

Conclusion: Dentigerous cysts can both prevent the eruption of permanent teeth and may be located close to the nerve. In such cases, the cyst can be treated without damaging the nerve with conservative methods such as decompression, and the related tooth can be erupted by orthodontic treatment simultaneously.

Keywords: decompression, dentigerous cyst, mandible

PP-19
Spontaneous Tooth Eruption After Marsupialization of A Dentigerous Cyst (A Case Report)

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Ondokuz Mayıs University, Faculty Of Dentistry, Department of Oral and Maxillofacial Surgery, Samsun

Objective: Dentigerous cysts are benign odontogenic cysts associated with the follicle of unerupted permanent teeth crowns. Treatment alternatives include enucleation and marsupialization. The treatment decision should be made according to criteria such as cyst size and location. An associated unerupted tooth is also an important factor that should be thought in treatment plan especially in pediatric patients. In this case report, treatment of a dentigerous cyst associated with maxillary permanent canine tooth, in a pediatric patient was described.

Case: The patient was an 11-year-old male with Down syndrome. Marsupialization was planned as the initial treatment to protect the permanent canine. A gauze iodoform was placed into the cyst cavity and sutured to gingiva after the extraction of deciduous lateral incisor, canine and molar teeth. The gauze iodoform was taken 5 days later after the operation and a window through the extracted socket was created. Patient family was instructed to irrigate the cavity daily and the cyst window remained open. The patient was followed for 1 year. The radiograph taken 8 months after the operation revealed that the cystic cavity had been replaced by new bone and the canine started to eruption in the dental arch.

Conclusion: Marsupialization is a conservative treatment option for extensive lesions, especially in pediatric patients, as in this report, because of protecting unerupted tooth germs and anatomical structures.

Keywords: dentigerous cyst, marsupialization, tooth eruption

figure 1

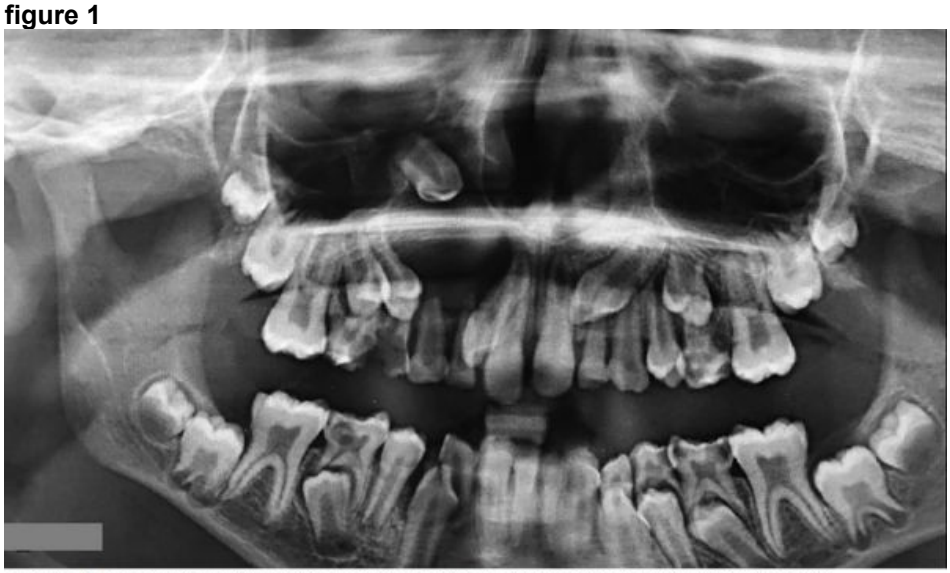

Figure 1: Preoperative orthopantomography showing a circular radiolucent lesion around the unerupted maxillary canine.

Preoperative orthopantomography showing a circular radiolucent lesion around the unerupted maxillary canine.

figure 2

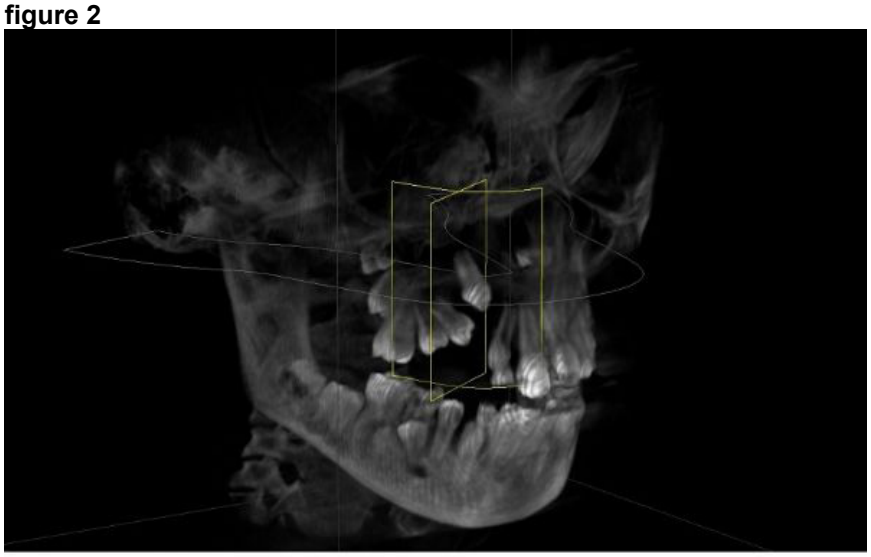

Figure 2: Preoperative CBCT image

Preoperative CBCT image

figure 3

Figure 3: Spontaneous eruption of the maxillary right canine 8 months after marsupialization of the dentigerous cyst.

Spontaneous eruption of the maxillary right canine 8 months after marsupialization of the dentigerous cyst

PP-20
An Epibulbar Dermoid Cyst of the Left Lateral Eyebrow

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[3]*Oral and Maxillofacial Surgery, Lokman Hekim University, Ankara,Turkey*

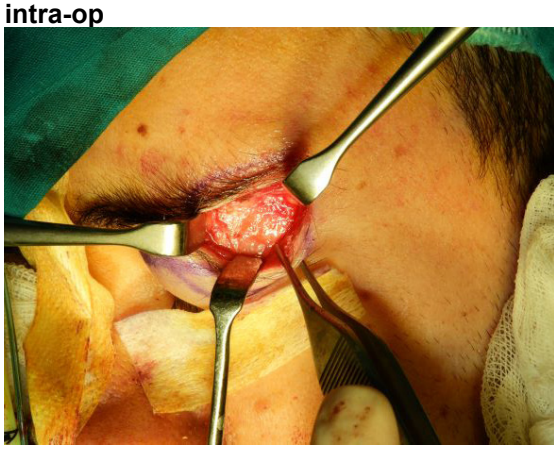
Objective: Dermoid cysts are a type of cyst that is frequently encountered in children. Epibulbar dermoid cyst is typically yellow in color and soft in consistency, molding to the curve of the eye. The purpose of this study is to present a case of dermoid cyst excision under general anesthesia.

Case: A 22-year-old male patient referred to our clinic for evaluation of facial asymmetry. Components of soft tissue, dental and skeletal differences contributing to facial asymmetry are evaluated. Physical examination revealed a mass in the left eyebrow region in addition to class III and open bite malocclusion. According to the medical history obtained from his parents, the mass were palpable from birth and growing slowly. The patient did not have any visual compromise. Excision of the lesion under general anesthesia discussed with the patient and patient accepted the procedure. Lesion excised and surgical specimen sent for histopathological examination. Pathologic diagnosis confirmed that the dermoid cyst.

Conclusion: Dermoid cysts are operated not only for the removal of poor cosmetic appearance, prevention of secondary bone changes and infection risk must be kept in mind.

Keywords: dermoid cyst, epibulbar cyst, epidermoid cyst

intra-op

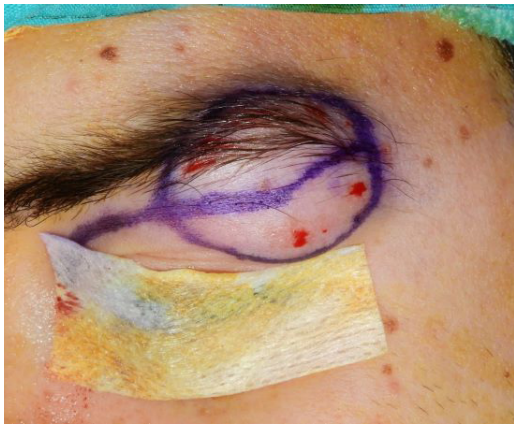


after removal of the cyst

intra-op

removal of the cyst by blunt dissection

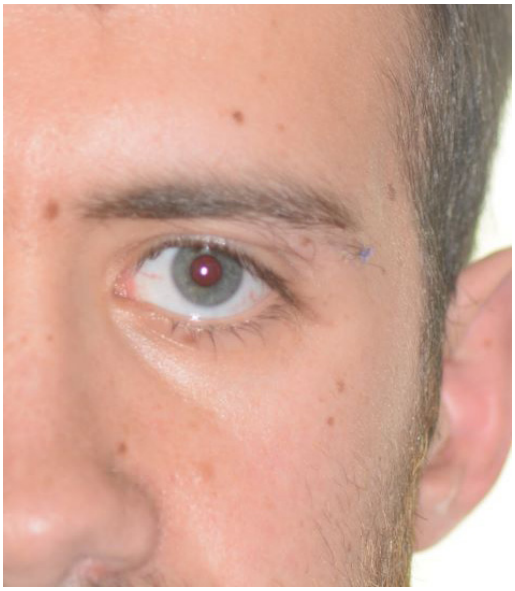
intra-op



marking the incision line

pre-op

post-op



PP-21
Reactivation of Varicella Zoster-Virus in Response to Trigger Point Injection with Local Anesthetic: A Case Report

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Bezmialem University, Faculty of Dentistry, Oral and Maxillofacial Surgery, İstanbul / Turkey

Objective: Herpes zoster (HZ) is a disease caused by reactivation of the varicella-zoster virus (VZV) after primary acute infection which is commonly known as chickenpox. After recovering from the primary infection, the virus becomes latent in the sensory ganglia. Reactivation of latent VZV is characterized by the presence of pain with a sensation of itching, tingling, and burning, followed by a vesicular cutaneous eruption localized according to the involved dermatome. The increasing number of reports documenting local herpes zoster outbreaks following surgical attempts is significant. The objective of this case report is to emphasize the reactivation of VZV after the injection of masseter muscle trigger points.

Case: We report a case of a 68-year-old woman with a history of diabetes and hypertension, admitted to our clinic with moderate pain in the left temporomandibular joint and masseteric area with no history of herpes zoster. During clinical examination, trigger points in the left masseter were spotted and bupivacaine injection was administered. 4 days after the injection, erythematous vesicular rashes appeared on the neck and ear with itching and burning symptoms. After dermatology consultation, a diagnosis of cervical herpes zoster was made and systemic brivudine treatment was prescribed to the patient by her dermatologist. 3 days after the vesicular appearance, lesions started to peel away and after 2 weeks, most of the lesions were disappeared with no residual sequelae.

Conclusion: This case report suggests that local trauma and surgical stress may be a possible inducement for the reactivation of VZV. Clinicians should be aware of this possible outcome after trigger point injection.

Keywords: trigger point injection, herpes zoster, bupivacaine

PP-22
Management Of Complex Odontoma In Posterior Maxilla

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Department of Oral and Maxillafacial Surgery, School of Dentistry, Kutahya Health Science University, Kutahya, Turkey

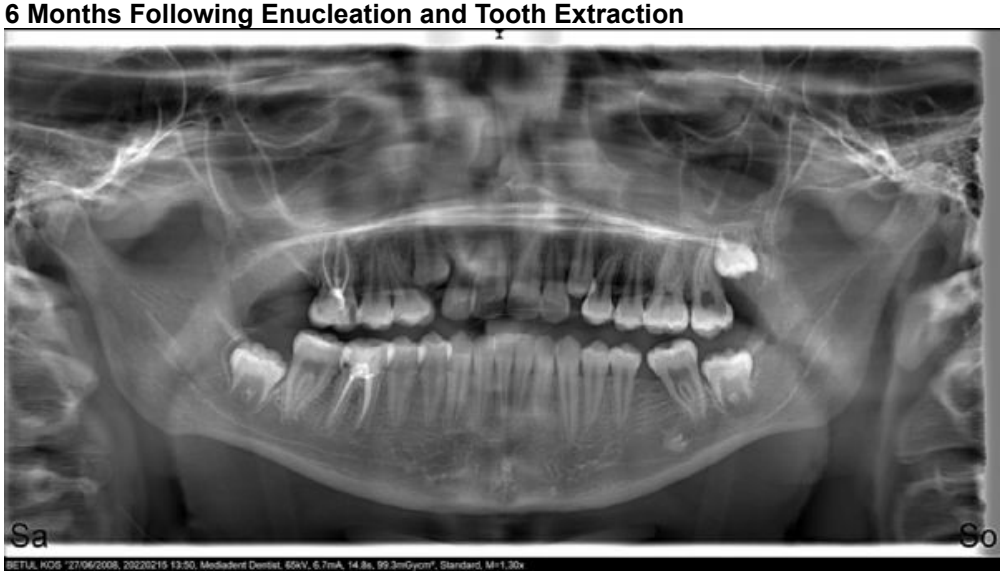
Objective: Odontomas are hamartomas which consist of different types of dental tissue (enamel, cementum, dentin). They are slow-growing benign tumors with unknown etiology. Most of the odontomas show no signs and symptoms until exposing the oral cavity. Thus, they are detected in routine radiographs and have non-aggressive behaviour.

Case: A 13-year-old girl was referred to our department for the evaluation of well-defined radiopaque mass associated with impacted upper right second molar adjacent to maxillary sinus. After clinical and radiological examination, surgery was performed. The mass was removed with associated tooth. Removed mass was sent to histopathological examination and reported as complex odontoma. Recurrence was not detected in 6 months follow up.

Conclusion: Odontomas are usually asymptomatic and are detected during routine radiographic examinations. The treatment of choice is surgical removal, usually performed by ostectomies to expose the tumor. However, close follow up and frequent control is important for the successful treatment.

Keywords: Impacted tooth, Mass

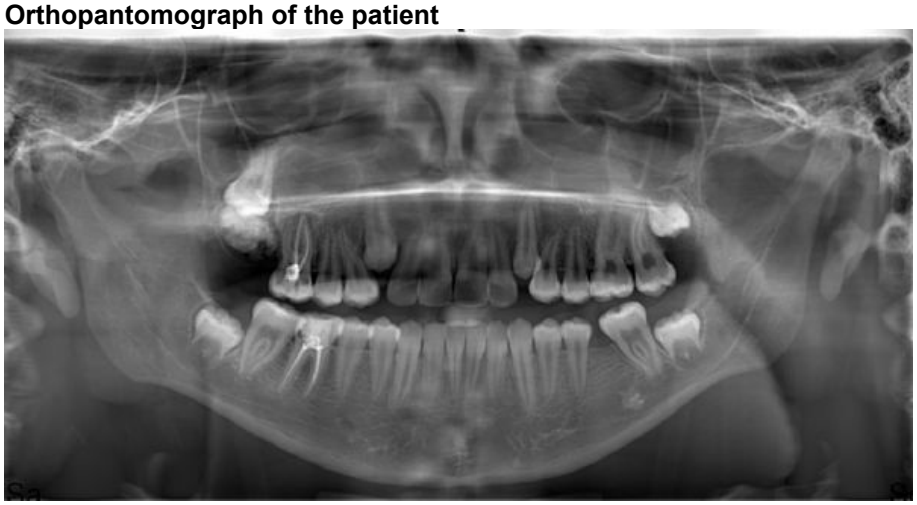
6 Months Following Enucleation and Tooth Extraction



Intraoral view of the odontoma

Removed odontoma (upper) and removed tooth (lower)

Orthopantomograph of the patient



PP-23
Extrafollicular Type Adenomatoid Odontogenic Tumor: A Case Report

Nida Geçkil
Şanlıurfa Ağız ve Diş Sağlığı Hastanesi

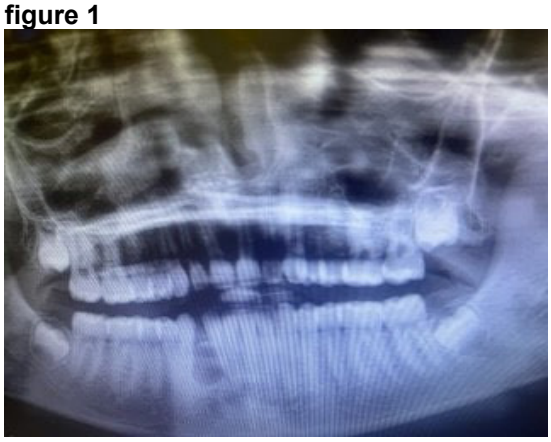
Objective: Adenomatoid odontogenic tumor, is more common in women and young people. As localization, it is usually located in the anterior region of the maxilla. It is an epithelial tumor and is usually smaller than three centimeters.
Clinically, it appears as an asymptomatic fibrous swelling expanding on the gingiva. It can occur with an impacted tooth (follicular) or unrelated to an impacted tooth (extrafollicular). It can be easily enucleated because it is in encapsulated structure. Recurrence is not usually seen.

Case: A 14-year-old female patient was admitted to our clinic with the complaint of a hard swelling in the canine region of the right mandible. In the anamnesis, it was learned that the patient was systemically healthy, the current complaint had continued for one year and there were no other symptoms. The teeth in the area were vital and the mucosa had a normal appearance. Panoramic radiography revealed a well-circumscribed, 2 cm diameter radiolucent mass that caused expansion in the buccal cortex in the area of teeth 42, 43 and caused migration in the tooth roots.

Conclusion: In this presentation, it is aimed to explain a rare case and its positive response to surgical treatment.

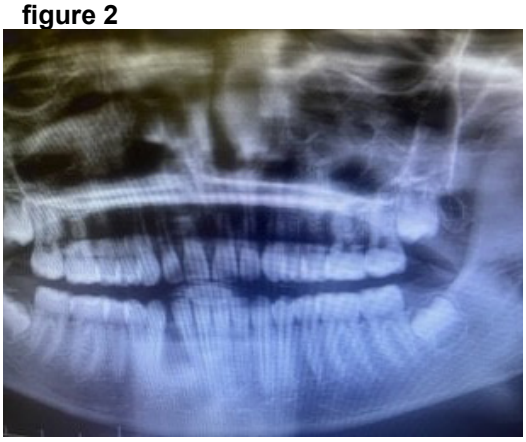
Keywords: pathology, adenomatoid odontogenic tumor, surgery

figure 1



Panoramic radiography showed a radiolucent area in the right lower canine region

figure 2



There was no problem in the control radiograph after the surgical treatment.

figure 3

Orthodontic treatment may be recommended for expanded teeth after one year of follow-up.

PP-24
Actinomycoses Accompanying Dentigerous Cyst: A case report

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Department of Oral and Maxillofacial Surgery, Sivas Cumhuriyet University Faculty of Dentistry, Sivas, Turkey

Objective: Actinomycosis is a rare chronic infection caused by Actinomyces species, which are anaerobic or facultative anaerobic, capsule-free, usually immobile Gram-positive bacteria. There are four main clinical forms: cervicofacial, thoracic, abdominal and vaginal. Actinomyces-related lesions such as radicular cyst, dentigerous cyst, keratocystic odontogenic tumor and osteomyelitis of the jaw have been reported by many authors.

Case: In this study, we present the clinical, histopathological features and treatment of a dentigerous cyst associated with actinomycosis in mandibular third molar region of a 45-year-old female patient. Actinomycosis treatment is based on the use of antibiotics. Surgical debridement therapy is indicated only in the presence of bone lesions. In this case, antibiotic treatment was applied following surgical excision of the dentigerous cyst and a significant improvement was observed in the lesion.

Conclusion: This extremely rare case of osteolytic lesions required special diagnosis and treatment planning, evaluation of treatment results and follow-up.

Keywords: actinomycosis, Actinomyces israelii, dentigerous cyst

PP-25
Odontogenic Myxoma: A Case Report

Ahmet İlker Gürsoy, İrem Asya Kafadar, Gözde Işık, Tayfun Günbay
Ege Üniversitesi Diş Hekimliği Fakültesi, Ağız Diş ve Çene Cerrahisi Anabilim Dalı, İzmir

Objective: The aim of the study is to present the conservative surgical treatment of odontogenic myxoma.

Case: A 40 year-old female patient was referred our department. The patient complains about swelling in the right posterior mandible. In clinical examination, there was not any pain in the lesion site. Swelling and stiffness was observed in mandibular ramus and retromolar area. Multilocular odontogenic lesion was determined in radiological examination. The lesion texture in OPTG was like honeycomb. Tooth number 47 is vital. In addition, minor resorption was noticed on distal root of tooth number 47. An immediate CBCT was performed to define three dimentional evaluation of the lesion. There was multilocular lesion view in between tooth number 47 and middle of mandibular ramus at anteroposterior direction. Additionaly, the lesion site included inferior alveolar canal. Aggressive curettage and peripheral ostectomy was performed. Although bone expansion was observed, soft tissue infiltration was not observed intraoperatively. Tooth number 47 was extracted due to poor diagnosis because of external root resorption. Biopsy specimen was collected and stored in %10 formalin. Histopathological examination stated that spindle shaped stellate tumor cells without cellular atypia and mitosis. Final diagnosis was odontogenic myxoma obviously. The patient was informed about 6 months follow-up schedule.

Conclusion: Odontogenic myxoma is benign, local aggressive odontogenic tumor in maxillofacial region. In differential diagnosis, care should be taken to avoid confusion with other tumoral entities. Postoperative follow-up appointments are important because the incidence of recurrence and residue is high.

Keywords: odontogenic myxoma, conservative surgical treatment

PP-26
Odontogenic Myxoma In The Mandible: A Case Report

Ferhat Musulluoğlu, Hilal Alan
İnönü Üniversitesi Diş Hekimliği Fakültesi Ağız Diş Ve Çene Cerrahisi Anabilim Dalı

Objective: Myxomas are benign, locally invasive tumors of mesenchymal origin that do not metastasize. It is seen in 1%-17.7% of all odontogenic tumors. There are many treatment options from curettage to block resection. It shows high recurrence rates as a result of treatments performed only by curettage. Therefore, in some cases, resection is required. In this case report, we present the treatment of odontogenic myxoma in the right mandibular region.

Case: A 12-year-old male patient was admitted to our clinic with complaints of swelling in the right mandibular region. As a result of the intraoral and radiological examination, the patient's right mandibular second premolar tooth was not erupted and swelling was detected on palpation in relevant area. Radiograph showed a multilocular radiolucent lesion associated with an unerupted tooth, separated by radiopaque septa. As a result of incisional biopsy, the lesion was diagnosed as Odontogenic myxoma. The entire lesion was excised under local anesthesia and the area was extensively curetted up to the healthy bone tissue. No recurrence was observed in the follow-up radiograph of the patient 9 months later. The patient's routine controls continue.

Conclusion: Odontogenic myxomas are usually seen between the ages of 10 and 40 and are more common in women. This lesion, which is thought to originate from the dental follicle or periodontal ligament, has treatment options ranging from curettage to radical resection. In this case, due to the small size of the lesion and the age of the patient, curettage treatment with peripheral osteotomy was applied.

Keywords: Mandible, Odontogenic myxoma

PP-27
Oral Lipoma: Case Report

Bahadır Sancar, Ferhat Musulluoğlu
İnönü Üniversitesi Diş Hekimliği Fakültesi Ağız Diş Ve Çene Cerrahisi Anabilim Dalı

Objective: Lipoma; it is a benign, slow growing and usually painless soft tissue tumor of mesenchymal origin, consisting of mature adipocytes. 15% to 20% of lipomas occur in the head and neck region, and 1% to 4% of these are seen intraorally. Oral lipomas have been reported to occur at various sites, including the salivary glands, buccal mucosa, gingiva, lips, tongue, and floor of the mouth. In this case report, we present the treatment of oral lipoma in the mandibular buccal mucosa.

Case: 52 years old patient applied to our clinic with the complaint of swelling in the right mandibular region. As a result of the intraoral examination of the patient, a soft, painless lesion was detected on palpation in the right mandibular buccal mucosa. As a result of radiological examination, no pathological lesion was observed. Considering the characteristic features of the lesion such as softness on palpation, painless and slow growth, the lesion was prediagnosed as lipoma. The lesion was exposed by an incision made in the buccal mucosa under local anesthesia. Proceeding with blunt dissection, the lesion was dissected and completely removed. The patient's routine controls continue.

Conclusion: Lipomas are soft tissue tumors that can be seen in any part of the body. Oral lipomas are generally seen in individuals between the ages of 40-60. Treatment of lipomas is complete surgical excision of the lesion. No recurrence is observed after adequate excision. In this case report, total excision of the lesion was performed and no recurrence was observed.

Keywords: Benign Tumor, Oral Lipoma

PP-28
Odontogenic Keratocyst In Maxilla: Case Report

Bahadır Sancar, Ferhat Musulluoğlu
İnönü Üniversitesi Diş Hekimliği Fakültesi Ağız Diş Ve Çene Cerrahisi Anabilim Dalı

Objective: Odontogenic keratocysts are lesions arising from dental lamina remnants or basal epithelial cells. This cyst, which has a tendency to grow aggressively and has high recurrence rate, may be unilocular or multilocular, and may be associated with impacted teeth. It is usually seen in the mandibular posterior region or the ascending ramus. It has been reported that only 27% of the cases are seen in the maxilla. In this case, we present the treatment of keratocyst seen in maxilla anterior region.

Case: A 19 year-old female patient applied to our clinic with complaints of swelling and pain in the left maxillary region. As a result of intraoral and radiographic examination, a large radiolucent lesion with clear borders was detected in the left maxillary region. Intraoral examination revealed slight expansion in the region. As a result of the vitality test, it was determined that the teeth of the patient 11-12-21-22-23-24-25 were devital. As a result of incisional biopsy, the lesion was diagnosed as keratocyst. Root canal treatments of all devital teeth were completed and the cyst was enucleated. The patient's symptoms resolved and improvement was observed in the 6-month follow-up radiograph.

Conclusion: Odontogenic keratocyst has an incidence rate of 19% among all odontogenic cysts. It is more common in men, usually in the second and third decades. Conservative treatment generally includes enucleation, decompression or marsupialization, and aggressive treatment usually includes peripheral ostectomy and resection. In this case, enucleation treatment was considered appropriate considering the location and size of the lesion.

Keywords: Keratocyst, Maxilla

PP-29
Fibrous Dysplasia of the Anterior Mandible

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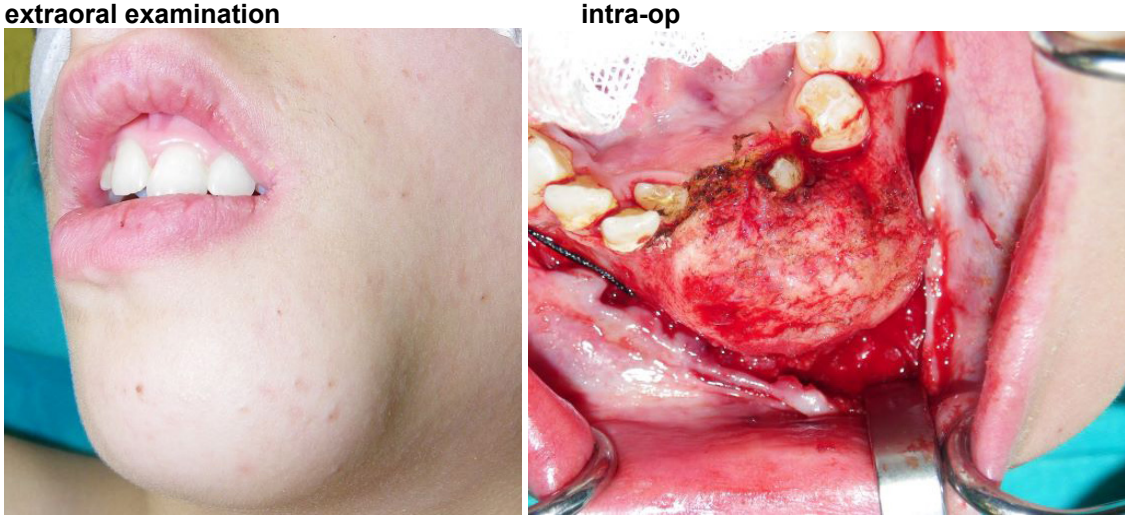
Objective: Fibrous dysplasia is a rare bony disorder in which normal bone is replaced by abnormal fibro-osseous tissue. It often involves the long bones, craniofacial bones, ribs, and pelvis. Approximately 30% of monostotic fibrous dysplasia lesions are found in the cranial or facial bones. Aim of this study to present a case of anterior mandible and its surgical treatment.

Case: 15-year-old female patient referred to our department with painless swelling at the anterior mandible. The clinical examination showed both the labial and lingual bone expansion. The patient had complaints of facial asymmetry due to expansion. The radiographic examination revealed a lesion with both radiopaque and radiolucent features showing a "ground-glass" appearance. Surgical trimming of the bony expansion under general anesthesia discussed with the patient's parents and they accepted the procedure.

Conclusion: Fibrous dysplasia is rarely seen in the mandible anterior. Surgical technique should be chosen carefully between radical surgery and conservative surgery in adolescences.

Keywords: fibrous dysplasia, fibrooseous lesion

extraoral examination **intra-op**



extraoral swelling at the anterior mandible

intra-op **post-op**

radiographic examination

axial tomographic section

PP-30
The Conservative Treatment of Osteolytic Lesions of the Jaws with Vitamin D Replacement

Fatma Bahar Sezer, Sultan Büşra Horzum Turgut
Ege University Faculty of Dentistry

Objective: Osteolytic lesions of the jaw are not uncommon. Such lesions usually arise from local pathologies, but some have systemic backgrounds. Lesions of jaw can develop secondary to hyperparathyroidism due to vitamin D deficiency. We present a rare case of an osteolytic lesion associated with secondary hyperparathyroidism due to vitamin D deficiency, treated with vitamin D supplementation. The aim of this study is to demonstrate that vitamin D and parathyroid hormone should be evaluated in osteolytic lesions of the jaw before any surgery.

Case: A 5-year-old boy who presented with a left mandibular swelling was corresponding to a radiolucent lesion in the left molar/ramus region. Cone beam computed tomography showed an expansible lytic lesion on the left side of the mandible ramus. No accurate finding was obtained after the biopsy. However, the workup investigations revealed secondary hyperparathyroidism due to vitamin D deficiency. The vitamin D replacement was initiated with 10,000 I.U orally, weekly. Two months later, his Vitamin D and parathyroid hormone were normalized, and he showed significant clinical and radiological improvement of the jaw lesion. At 3 years, follow-up the panoramic image revealed complete resolution of the radiolucency and stable normal parathyroid hormone and vitamin D levels.

Conclusion: Vitamin D and parathyroid hormone blood values of the patients should be requested in relation to osteolytic lesions in the jaws that are not thought to originate from teeth. Vitamin D deficiency was treated as indicated by the endocrinologist before any surgery to correct hyperparathyroidism. This may prevent unnecessary surgical intervention in such patients.

Keywords: Hyperparathyroidism, Osteolytic Lesions, Vitamin D

PP-31
Giant Keratocyst: Case Report

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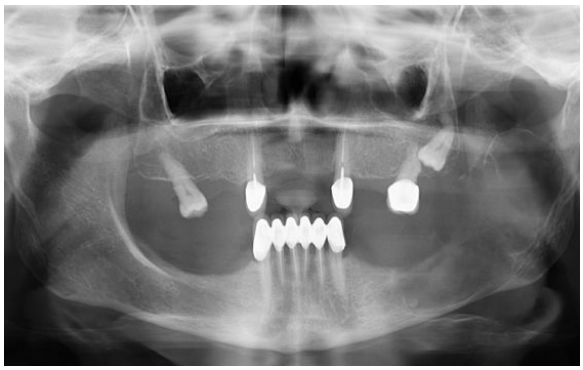
Objective: Although odontogenic ketatocysts are benign pathologies, they are remarkable lesions due to their aggressive behavior and recurrence tendencies. It is most common in the posterior mandible. It is generally known as multilocular radiolucency, but it can also be seen as monolocular radiolucency. In many cases, they do not give any obvious symptoms until they reach large sizes. There are many treatment strategies ranging from decompression/ marsupialization techniques to segmental jaw resections

Case: A 59-year-old female patient presented with the complaint that her removable partial denture did not fit her mouth. In the intraoral examination, expansion was observed in the left mandible. Radiographic examination revealed a radiopaque limited monolocular lesion extending from the premolar region to the incisura mandible. A biopsy was done. Results showed odontogenic keratocyst. Since the lesion was very large, enucleation and curettage were planned after decompression. A drain was placed under local anesthesia. Regular irrigation was done. After 3 months, orthopanoramic x-ray control was performed. Orthopanoramic x-ray showed that the lesion was smaller.

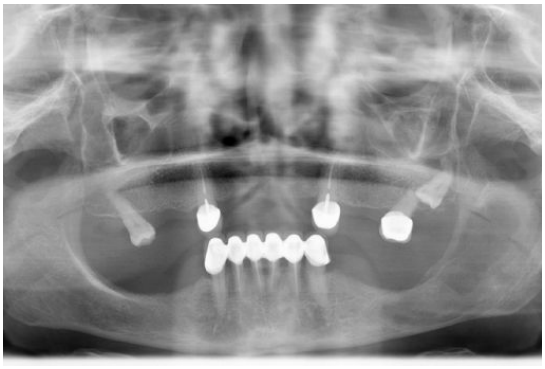
Conclusion: The patient was 59 years old and could not tolerate the drains we placed due to his age. In addition, after telling the patient that his condition was good and that the lesion was shrinking rapidly, the patient did not come for follow-up in two years.

Keywords: odontogenic keratocyst, decompression, aggressive lesion

1



2



PP-32
Transpositional Vestibuloplasty: Case Report

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Objective: After tooth extraction, resorption of the alveolar crest is inevitable. A shallow vestibule sulcus is encountered as a result of large resorption of the mandibular crest. This causes the destabilization of the removable partial prosthesis. One of the techniques used to increase the depth of the vestibular sulcus is the transpositional vestibuloplasty technique. For this procedure, there must be at least 15 mm of alveolar bone height in the area between the mental foramen.

Case: Two male patients, 58 and 56 years old, were referred to us for vestibuloplasty before the removable partial prosthesis was applied. Radiographic examination revealed 36 millimeter and 24 millimeter alveolar bone height, respectively. Under local anesthesia, a horizontal straight incision was made on the lower lip mucosa. A half-thickness flap was raised up to the crest. The periosteum in the vestibule of the alveolar bone was transposed over the open area of the lip. The movable flap obtained was sutured to the deepest part of the vestibular sulcus. Stitches were removed 10 days later.

Conclusion: Both of the patients did not experience any discomforting problems such as pain and swelling in the postoperative period. No complications were observed during or after the procedure. The vestibular depth obtained was extremely satisfactory.

Keywords: vestibuloplasty, modified kazanjian vestibuloplasty, transpositional vestibuloplasty

1.1

1.2

1.3

2.1

2.2

2.3

PP-33
Conservative Treatment of Mandibular Condyle Fracture in a Patient With Wegener's Granulomatosis

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Objective: Wegener's granulomatosis (WG) is an idiopathic, systemic inflammatory disease characterized by necrotizing granulomatous inflammation and pauci-immune small-vessel vasculitis of upper and lower respiratory tract and kidneys. WG has a initial presenting symptoms including salivary gland enlargement oral and/or nasal ulcers. Oral manifestations of WG include delayed healing of extraction wounds, osteomylitis, resorption and osteonecrosis.

Case: A 71-year-old female patient was admitted to our clinic with a history of trauma to the chin area as a result of falling on a hard floor. Her medical history was significant for heart rhythm disorder and WG. She was taking medications to manage these conditions, including prednisone and methotrexat. In his clinical examination, widespread ecchymosis spreading to the extraoral neck planes, limitation in mouth opening was observed. Radiographic examination revealed a non-displaced fracture in the left mandibular condyle at the intracapsular level and clinically vertical loss in the relevant region. A total prosthesis was applied to the patient to increase the vertical dimension in the fracture area. Fracture treatment was carried out by preventing complications that may occur in invasive procedures with conservative treatment.

Conclusion: WG is a multisystem disease with significant morbidity and mortality, which limits invasive procedures both in relation to the disease and drugs. In our case, we performed the treatment of unilateral condyle fracture with a conservative method. We did not encounter any problems in the follow-up of the patient. We presented our case report to increase awareness of WG and dental management strategies.

Keywords: Conservative Treatment, Wegener's granulomatosis

The view of facial and neck ecchymosis of patient

The view of facial and neck ecchymosis of patient

Preoperative maxillofacial tomography

Fracture displacement view in preoperative maxillofacial tomography

View of custom made total prosthesis of patient

View of custom made total prosthesis of patient

Postoperative mouth opening mesurement

Postoperative mouth opening mesurement

PP-34
Surgical Management of Giant Submandibular Sialolith: Report of Two Cases

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Objective: Sialolithiasis is one of most common diseases to affect major salivary glands. This condition is associated with obstruction of a salivary gland or its excretory duct. Choice treatment for submandibular sialoliths are sialoadenectomy by intraoral or extraoral approachs. This report presents clinical/radiographical signs and surgical management of two giant sialoliths.

Case: The first case is a 66 year old male patient with Buerger's disease as a systemic disorder. The patient was referred to our clinic for impacted tooth extraction. The patient had complaining of pain and swelling in the right submandibular region. On clinical examination, we palpated a hard swelling on the right submandibular gland duct. In panoramic radiograph a giant sialolith 22 mm in length was found on right submandibular area. The second case is a 61 year old male patient, admitted to our clinic with complaints of pain and swelling in the right submandibular region. The patient had uncontrolled diabetes and renal dysfunction. On bimanual palpation firm swelling was found in submandibular region and posterior floor of the mouth. Radiographic examinations showed a giant sialolith 18 mm in length, in the right submandibular region. In both cases, The lesions were removed, by intraoral approach with minimally invasive surgery. Both patients had an uneventful postoperative in 6 months fowling

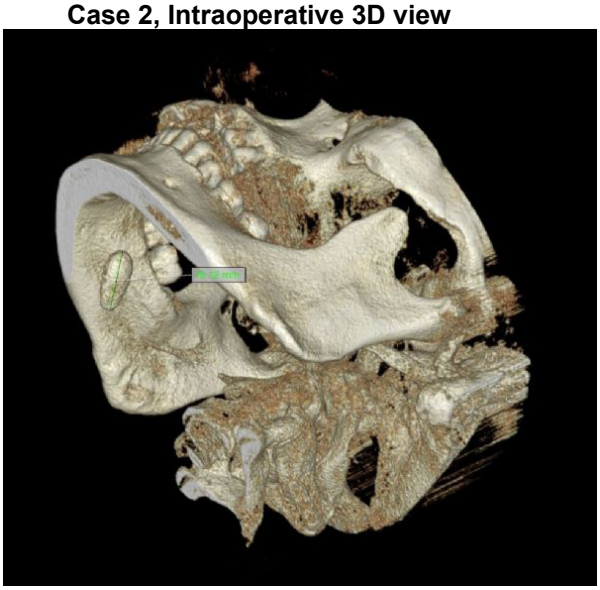
Conclusion: Current treatment procedure such as sialoendoscopy and short-wave lithotripsy are effective for smaller sialoliths. However, for giant sialoliths, transoral sialolithotomy with sialodochoplasty or sialadenectomy remains the mainstay of management.

Keywords: Giant, Submandibular Sialolith

Case 1, Intraoperative CBCT

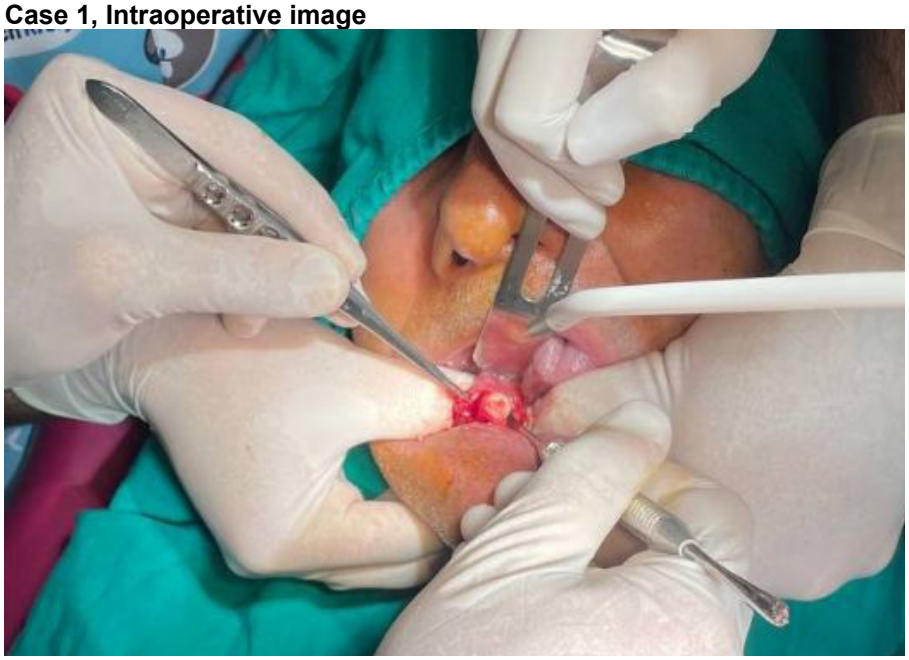
Case 1, Intraoperative CBCT

Case 2, Intraoperative 3D view

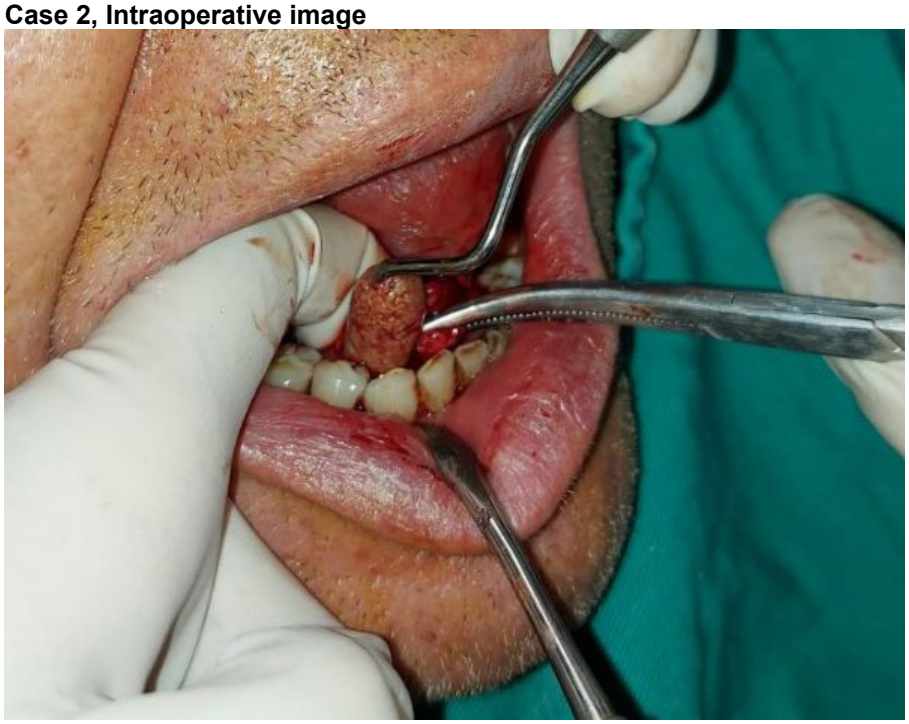


Case 2, Intraoperative 3D view

Case 1, Intraoperative image



Case 2, Intraoperative image



PP-35
Verrucous Carcinoma Seen at Oral Mucosa and Treatment Methods: A Case Report

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Ağız Diş ve Çene Cerrahisi Diş Hekimliği Fakültesi, Hacettepe Üniversitesi, Ankara

Objective: Oral verrucous carcinoma(OVC) is a low-grade variant of oral squamous cell carcinoma. Although there is not an accurate etiology, human papillomavirus, chewing tobacco, and ultraviolet radiation can be potential factors. This lesion is usually seen in elderly male patients with a long history of smoking or chewing tobacco. Oral lesions are in white or red color, especially seen in the vestibule mucosa and buccal gingiva. There are several treatment options such as surgery, radiotherapy, chemotherapy, chemoradiotherapy, CO2 laser therapy, photodynamic therapy.

Case: A 59-year-old female patient with hypertension was referred to Hacettepe University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery for the evaluation of the painful and bleeding lesion noticed three months ago. Ant destruction was observed at radiological evaluation. Biopsy was applied to the lesion from the vestibule on the right lower canine-premolar region. The lesion was diagnosed as verrucous carcinoma after histopathological examination. The patient was consulted in oncology for treatment.

Conclusion: Identification of the biomarkers and multifactorial etiology of OVC can provide information about the therapeutic pathogenesis of the lesion. Surgery is still a preferable treatment option. However, more research is needed for treatment options of OVC to provide additional improvement in patient care.

Keywords: verricous carcinoma, epithelial tumors

PP-36
Treatment modalities of ameloblastoma with extensive destruction of the mandible

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Bezmialem Vakıf Üniversitesi, Ağız Diş ve Çene Cerrahisi ABD

Objective: Ameloblastoma is a benign odontogenic tumour, which often shows aggressive growth and a high recurrence rate. Unicystic ameloblastoma is considered to be a less aggressive form of ameloblastoma, treatment by conservative surgical methods is thought to be adequate for the majority of cases. In this case report, it is aimed to report the treatment of 2 unicystic ameloblastomas that caused aggressive destruction, requiring reconstruction plate placement after enucleation and aggressive curettage.

Cases:A 31-year-old male patient was admitted to our clinic with complaints of pain, swelling in the left mandibular region. In the radiological examination, it was observed that the radiolucent, multilocular lesion around the third molar,also caused root resorption. Biopsy performed during the extraction. The reconstruction plate was bent over the 3D solid model obtained from theCT and adjusted on the mandible. After enucleation and aggressive curettage, the reconstruction plate was placed to prevent a possible pathological fracture. A 35-year-old female patient, who had previously been operated on the right mandibular region and stated that cyst enucleation was performed, applied to our clinic with the complaint of pain. Radiologic examination revealed multilocular radiolucency. A biopsy was taken on the posterior and determined that it was unicystic ameloblastoma. Enucleation and aggressive curettage was planned. The reconstruction plate was bent on the 3D solid model and placed on the mandible following enucleation during the surgery.

Conclusion: Unicystic ameloblastoma is less aggressive than other ameloblastomas and it can be successfully treated with conservative surgical methods. In this case report, two cases of ameloblastoma on the posterior region of the mandible, which spread widely and were operated in a similar way are presented. No recurrance was observed during 12 months.

Keywords: Enucleation, Reconstruction Plate, Unicystic Ameloblastoma

PP-37
Surgical and Medical Management of Stage 3 Medication-Related Osteonecrosis of the Jaw: A case report

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Medication-related osteonecrosis of the jaw(MRONJ) is a severe side effect of antiresorptive and anti-angiogenic drugs used in the treatment of oncological and osteoporotic patients. Stage 3 findings of MRONJ, which is diagnosed and staged according to the American Association of Oral and Maxillofacial Surgeons (AAOMS) criteria, exposed and necrotic bone, or fistula that probe to bone, with evidence of infection, and one or more of the following: exposed necrotic bone extending beyond the region of alveolar bone, pathologic fracture, extraoral fistula, oral antral/ oral nasal communication, osteolysis extending to the inferior border of the mandible or sinus floor. The AAOMS has suggested treatment strategies, including medical management for the earlier stages(stages 0, I), and preferably, surgical interventions for the later stages(stages II, III). However, for the later stages, individual assessment of each patient is necessary. Although surgical treatment is typically recommended for the later stages, the extent of operative treatment remains controversial. The range of treatment modalities includes the simplest conservative treatmet, and when necessary/possible, combined with a sequestrectomy, to bony resection of all affected bone, with or without reconstruction with a microvascular free flap. Although options such as LPRF, hyperbaric oxygen therapy, and parathyroid hormone use have been suggested recently to increase the effectiveness of treatment, these options are still controversial. In this case report, surgical and medical treatment of a 64-year-old patient with a history of prostate cancer, a bilateral stage 3 MRONJ lesion in the mandible with extraoral fistula, and persistent infection with actinomyces will be presented.

Keywords: actinomyces, Medication-related osteonecrosis of the jaw, oral cancer

PP-38
Inferior Alveolar Nerve Lateralization In Atrophic Posterior Mandible: A Case Report

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Department of Oral and Maxillofacial Surgery, Inonu University Faculty of Dentistry Malatya

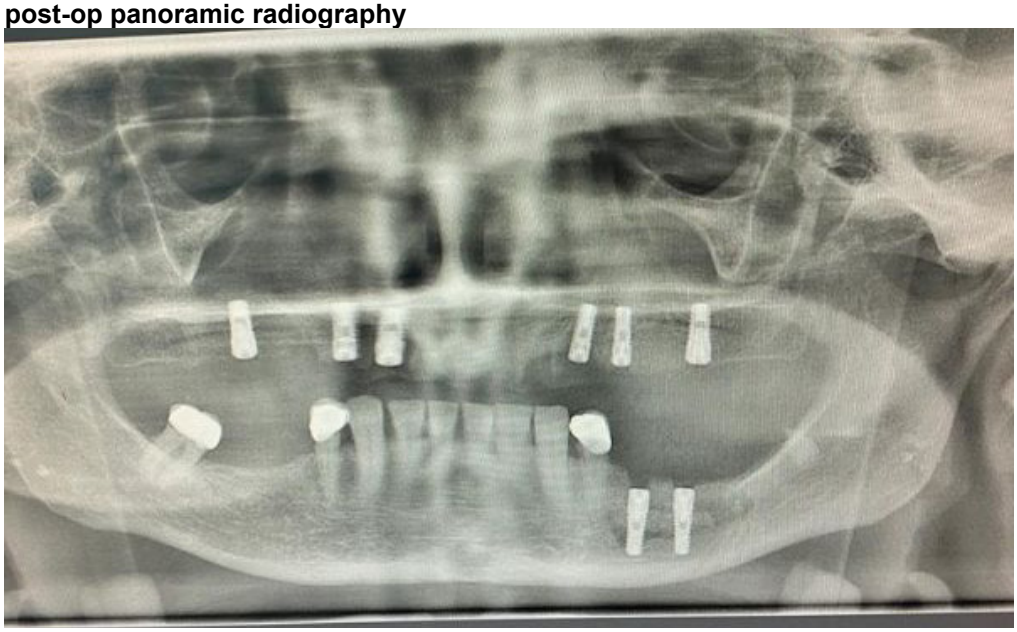
Objective: After long-term edentulism, advanced bone resorption occurs and the amount of bone above the inferior alveolar nerve is not sufficient for implant placement.In such cases, various methods can be used. These; short implant applications, onlay autogenous grafting methods can be used.On the other hand, by relocating the inferior alveolar nerve, sufficient distance can be obtained and the implant can be applied.

Case: A 43-year-old female patient without any systemic disease was admitted to our clinic due to partial edentulism.As a result of clinical and radiographic examinations, the bone distance between the inferior alveolar nerve and the alveolar crest was found to be insufficient, which would prevent the application of the ideal length implant due to bone resorption in the left posterior mandible. An incision extended from the middle of the alveolar crest to the retromolar region was made.The flap was relieved by making a vertical incision anteriorly. A lateral wındow ıs created usıng a pıezo devıce.The mental foromande was included in this window and the inferior alveolar nerve was positioned more laterally towards the opening window. Implants were placed in the area by gently holding the lateralized inferior alveolar nerve. The inferior alveolar nerve was released and the removed bone window was replaced after re-adaptation. Postoperative controls continue.

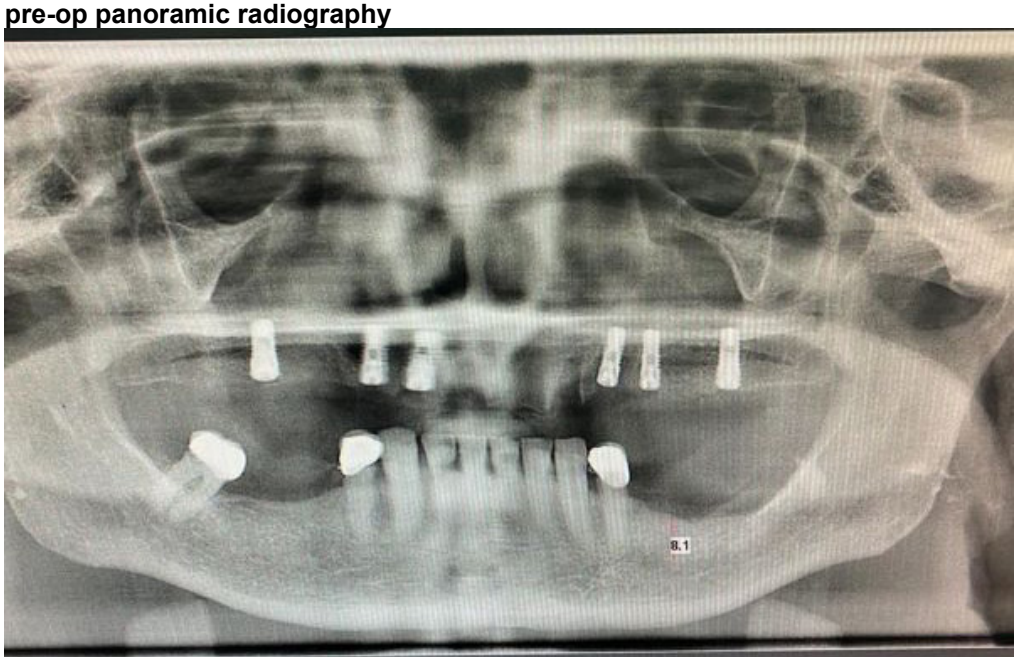
Conclusion: In the highly resorbed posterior mandible, implant treatment with inferior alveolar nerve reposition has many advantages such as shortening the treatment time and allowing longer implant placement. However, this technique carries the risk of high nerve trauma.

Keywords: Atrophic mandible, inferior alveolar nerve lateralization

post-op panoramic radiography



pre-op panoramic radiography



Reposition of the inferior alveolar nerve

PP-39
Ankyloglossia: A Case Report

Bahadır Sancar, Yunus Çetiner, Ömer Faruk Boylu
Department of Oral and Maxillofacial Surgery, Inonu University Faculty of Dentistry Malatya

Objective: Ankyloglossia is an uncommon congenital anomaly characterized by a short lingual frenulum. Tongue-tie (ankyloglossia) is the tissue that connects the tongue to the floor of the mouth and is called the frenulum, which is shorter than normal. In this study, the treatment of our patient who was diagnosed with ankyloglossia will be explained.

Case: A 23-year-old male patient was admitted to our clinic with the complaint of inability to stick out his tongue due to ankyloglossia. In the clinical examination of the patient, ankyloglossia was diagnosed by us. For surgical treatment bilateral lingula nerve block anesthesia was performed. Lower part of the tongue sticking to the floor of the mouth and the frenulum sticking to the tongue tip were restrained with a hemostat. After the incision was made with the help of a scalpel, blunt dissection was performed. During surgery, all anatomical structures were determined, and the veins running on both sides of the midline and the salivary glands in the lingual region were noted. After it was determined that the tongue was completely freed, the loosened wound ends formed under the tongue and on the floor of the mouth by blunt dissection were sutured with 4.0 silk sutures. After the surgery, it was observed that the patient could easily protrude his tongue. No complications were encountered after the operation.

Conclusion: Ankyloglossia affects tongue movements, making it difficult to both feed and speak. Frenectomy is performed in patients with ankyloglossia, a very safe and effective procedure used to release the tongue and improve tongue function.

Keywords: Ankyloglossia, frenectomy

intraop image

intraop image 2

postop 10. day

post-op image

post-op image 2

pre-op image

PP-40
Preventive Internal Fixation of Mandible After Enucleation a Large Radicular Cyst

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Objective: Radicular cysts are the most common odontogenic cyst of the jaws. Most of the radicular cyst is asymptomatic and they are noted as an incidental finding on radiographs. There we presented successful outcome of preventive internal fixation to avoid mandibular fracture after enucleation a large radicular cyst. Case: A 57 year old male patient admetted to our clinic with a complaint of painless swelling in the lower posterior jaw. The patient noticed a swelling that started two months ago, gradually growing and reaching its present size. Intraoral examination imparted swelling of approximately 2x2 cm in diameter, blue-violet in colour, with a normal surface, and soft consistency. Radiographic examination showed a well-defined unilocular radiolucency with sclerotic borders in the posterior region of the mandible. The Cone Beam Computed Tomography (CBCT) images revealed intact lingual cortex except for some minor perforations, with complete loss of the buccal cortex. A primary diagnosis of radicular cyst was considered. Under general anesthesia, after dissection and preservation of mental nerve, the cystic formation was enucleated and internal fixation with an eight hol miniplate was don to prevent postoperative mandible fracture. The case was diagnosed as radicular cyst after histopathological examination. Conclusion: Preventive internal fixation should be considered in cases when enucleation of large cystic lesions to avoid iatrogenic mandibular fractures.

Keywords: Preventive fixation, Radicular cyst

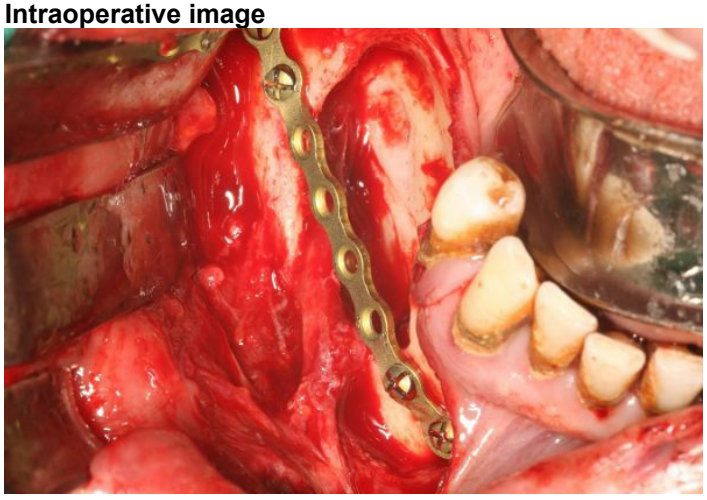
Intraoral clinical view

Preoperative intraoral view

Preoperative CBCT

Preoperative CBCT

Intraoperative image



postoperative 3 month follow-up OPG

postoperative 3 month follow-up OPG

PP-41
Aneurysmal Bone Cyst of the Pediatric Mandible: Report of 2 Cases

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Objective: Aneurysmal bone cysts(ABCs) are blood-filled, locally destructive, benign cystic bone tumors that acount for about 9.1 % of all primary bone lession. They typically occur during the second decade of life, with an average age of onset at 13 years. Mandible is the most common localization in craniofacial area. In the jaws, the ABC presents clinically as a well-limited firm swelling of the overlying soft tissues because of bony expansion, causing facial asymmetry.Radiographically, the usual sight is a radiolucency lesion expanding the cortex.

Case 1:A 14-year-old female patient was admitted to our clinic with the complaints of pain in the left mandibular corpus and a wide circumscribed radiolucent lesion diagnosed on routine panoramic. Incisional biopsy of the patient could not be performed under local anesthesia due to excessive bleeding, and wide curettage was performed under general anesthesia after embolization of the facial artery bracnhes related with the lesion. The biopsy result confirmed the diagnosis of ABC.

Case 2:An 11-year-old female patient who came to our clinic with the complaint of pain and radiolusent lesion was diagnosed with ABC after incisional biopsy from the right mandibular region. Wide surgical curettage was performed in our patient, and a reconstruction plate was applied to the surgery area.

Conclusion: The treatment options vary from follow-up, simple curettage, sclerotherapy, embolization, radiation therapy to complete resection and reconstruction. Curettage is the most frequently used treatment in ABCs, especially when the lesions are small. In the presentation, literature knowledge curettage was implement in the cases and a reconstruction plate was placed in one of our cases. After 12 month clinical follow-up of the cases and no recurrence was observed.

Keywords: aneurysmal bone cysts, curettage, embolization

PP-42
Ectopic Tooth Involving The Orbital Floor And Its Management

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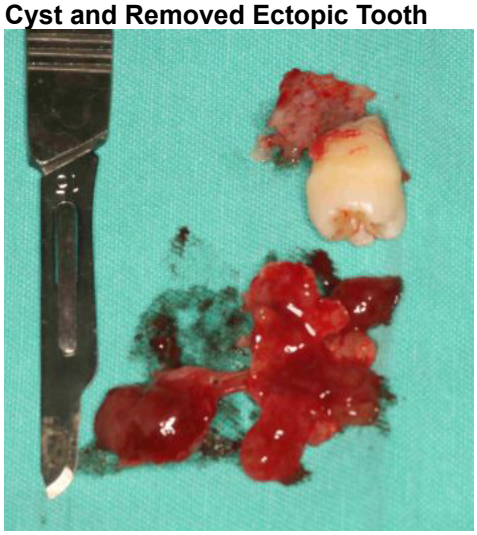
Objective: Eruption of tooth other than tooth-bearing region is defined as ectopic eruption. Although ectopic eruption of tooth is rare, ectopic teeth have been reported in maxillary sinus, nasal floor, chin, palate, mandibular condyle. Due to ıts rarity, a consensus has not been reached on management of ectopic teeth

Case: 24-year-old female patient referred to our department for the evaluation of tooth in the orbital floor. She had occasionally complaint of nasal congestion. After clinical and radiological examination, lesion surrounding the ectopic tooth was detected. Under the general anesthesia, caldwell-luc operation was planned and performed. Tooth was extracted and associated lesion was enucleated. Lesion was sent to histopathological examination and reported as dentigerous cyst. Resolution of the symptoms was noticed in the 4-week follow-up of the patient.

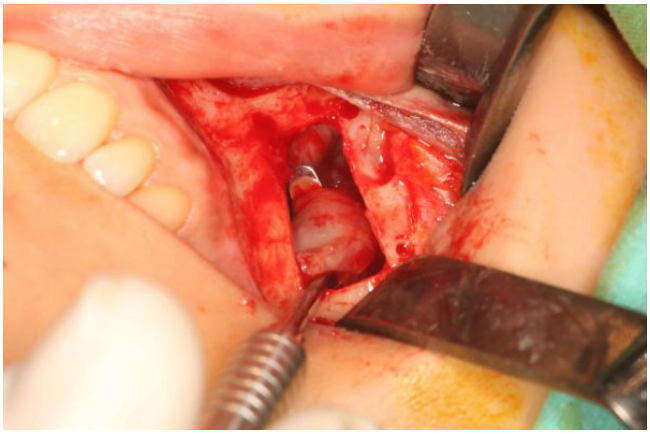
Conclusion: Ectopic teeth are usually asymptomatic and are detected during routine radiographic examinations. When ectopic teeth are asymptomatic, they should be followed up regularly to rule out cystic changes. Surgical removal is often preferred when ectopic teeth show signs and symptoms. Cadwell-luc is the most preferred approach while removing the teeth located in orbital floor.

Keywords: Tooth, Cadwell-luc, Orbita

Cyst and Removed Ectopic Tooth

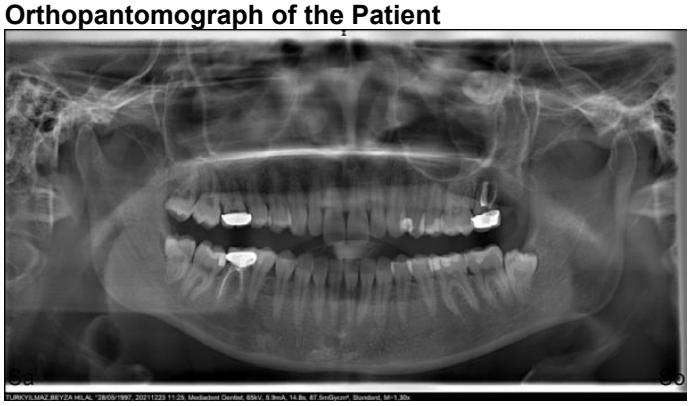


Cyst In Sinus Cavity

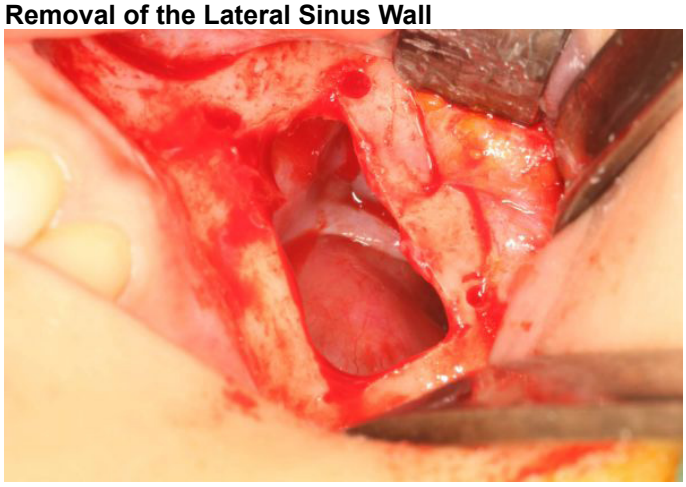


Markings of The Osteotomy Site

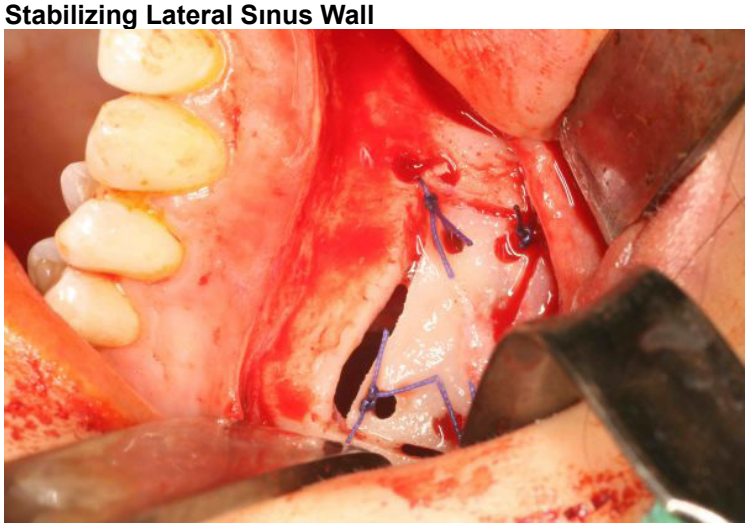
Orthopantomograph of the Patient



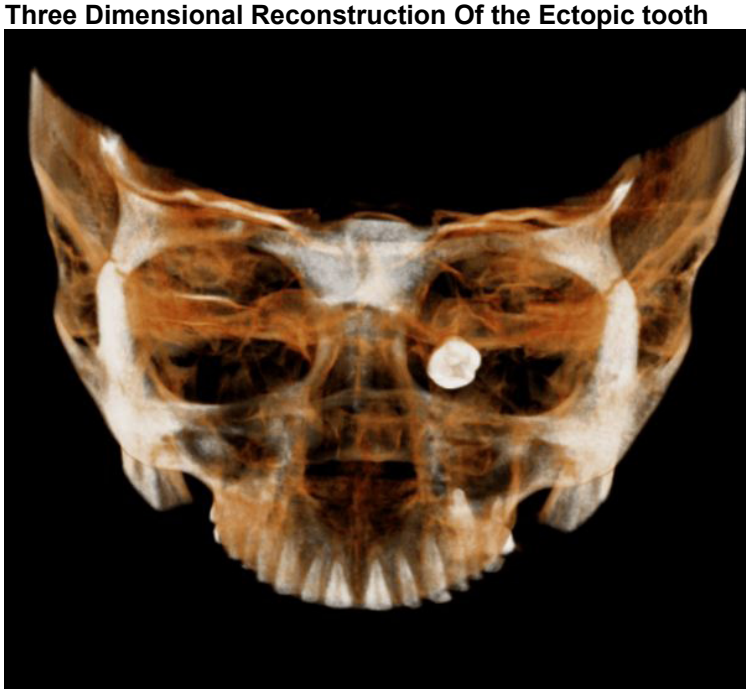
Removal of the Lateral Sinus Wall



Stabilizing Lateral Sınus Wall



Three Dimensional Reconstruction Of the Ectopic tooth



PP-43
Mandibular retrognathia treatment with orthognathic surgery

Hılal Alan, Fılız Uslu, Ozlem Elverıslı
Inonu Unıversity Faculty of Dentıstry

Objective: The combination of orthodontic and surgical treatment is a preferred treatment option for the correction of severe dentofacial deformities. For this purpose, many procedures have been applied and still continuing to be developed to provide the best function, aesthetics and stability. There are two types of treatment approaches in Class II malocclusions, which are skeletal components. The first is to perform orthodontic / orthopedic treatment in patients with growth and development, and the second is to apply orthognathic surgery and / or orthodontic treatment after growth and development.

Case: The 23 years old patient applied to Inonu University Faculty of Dentistry with mandible deficiency. Convex facial profile and Angle Class II molar occlusion were detected in the clinical examination of the patient. The mandible was advanced 5.2 mm by bilateral sagittal split osteotomy and fixed by rigid fixation.

Conclusion: Skeletal class II malocclusions result from mandibular retrognathy or maxillary prognathy. In this case report, the treatment process of a patient with deficiency skeletal class II malocclusion according to the mandible's skull base is described.

Keywords: bilateral sagittal split osteotomy, orthognathic surgery, retrognathia

opg1

preop opg

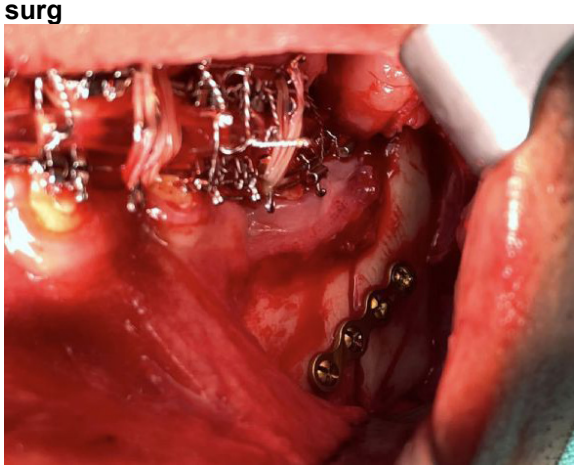
postop opg

postop opg

sefalometrik

sefalometrik

surg



surgery

surg

cerrahi

PP-44
Surgical management of mandibular asymmetry

Hılal Alan, Fılız Uslu, Ozlem Elverıslı
Inonu Unıversity Faculty of Dentıstry

Objective: Orthognathic surgery has been used to correct skeletal anomalies of the jaw bones and soft tissues. The goal of surgery, is not only to establish normal anatomic and functional relationships and an ideal dental occlusion, but to optimize facial aesthetics as well. Most lower and midface anomalies are managed with the following procedures: the LeFort I osteotomy, the bilateral sagittal split osteotomy, and the horizontal "sliding" osteotomy of the chin symphysis. Orthognathic surgery is often combined with genioplasty in an attempt to create an aesthetic facial shape.

Case: A 28-year-old female patient applied to our department with the complaint of dentofacial deformity. Orthognathic surgery (Le Fort I + sagittal split) and genioplasty was performed in the patient. Following clinical and cephalometric examination and preoperative orthodontic therapy, a Le Fort I osteotomy, a bilateral sagittal split osteotomy, and vertical and horizontal reduction genioplasties were performed. The maxilla was advancement in the anterior 3.40 mm and rotate 2 mm right position with le fort 1 osteotomy. The mandible was retracted 1.8 mm by bilateral sagittal split osteotomy and the chin tip was advanced 2mm forward and 2mm to the right fixed by rigid fixation.

Conclusion: Orthognathic surgery and genioplasty are used to create a stable, aesthetically pleasing facial contour, in addition to improving facial function.

Keywords: genioplasty, mandibular asymmetry, orthognathic surgery

postop opg

postop opg

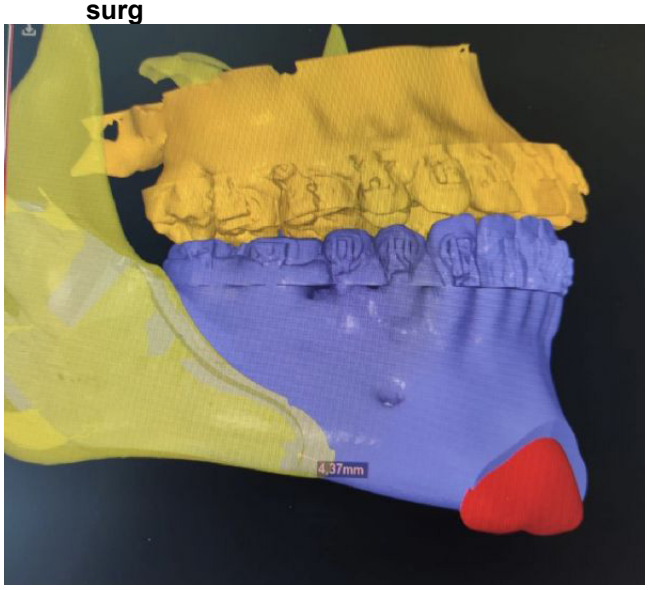
preop opg

preop opg

sefalometrik

sefalometrik

surg



planlama

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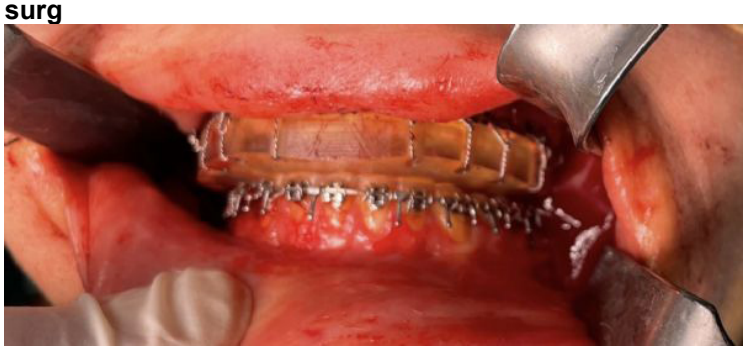

surgery

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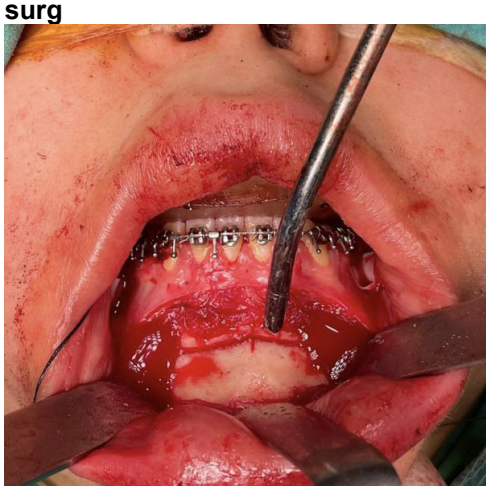

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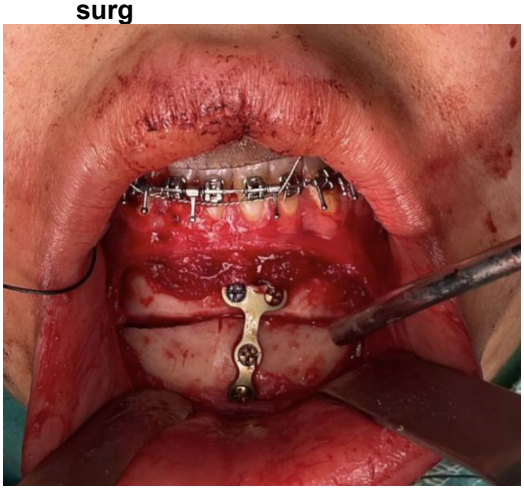

surgery

PP-45
Sublingual Gland Sialolithiasis: A Case Report

Yunus Çetiner, Ömer Faruk Boylu, Hilal Alan
Department of Oral and Maxillofacial Surgery, Inonu University Faculty of Dentistry Malatya

Objective: The term sialolith is used to describe the structure composed of protein decomposition products and calcium salts in the parenchyma or excretory ducts of the salivary glands. It is generally observed in the Submandibular gland and Wharton's duct in 80%, in 5-20% of the Parotid gland and Stenonda duct. Sialolith formation in the sublingual gland and Bartolini duct is a rare condition of 1–5%. In this case, the surgical treatment of sublingal salivary gland stone is described.

Case: A 35-year-old female patient was referred to our clinic with complaints of pain and swelling in the floor of the mouth. As a result of the clinical and radiological examination of the patient, the 15x15 mm sized lesion in the sublingual region, hard on palpation, and radiopaque on the radiograph, was evaluated as sialolith in the sublingual canal. Sialolith in the sublingual gland duct was enucleated intraorally from the patient who was operated under local anesthesia. No complications were encountered in the postoperative period. Patient follow-up continues.

Conclusion: Sialoliths are one of the most common diseases of the salivary glands. The growing stone gives symptoms with the reaction of the salivary gland duct. These symptoms are swelling, edema, pain, inflammatory conditions. Dentists may be the physicians who notice salivary gland stones routinely clinically and radiographically. If it does not affect the salivary gland functions and the patient has no complaints, it can be followed. In other cases, the stone should be surgically removed with an intraoral approach, if possible.

Keywords: sialolith, sublingual sialolith, sublingual gland

intraop image 1

intraop image 2

intraop image 3

PP-46
Spontaneous Healing Of The Iatrogenic Mandibular Fracture After Molar Extraction In A Patient With Undiagnosed Osteogenesis Imperfecta: A Case Report

Zulfikar Karabiyik, Berkan Altay, Mohammad Nabi Basiry
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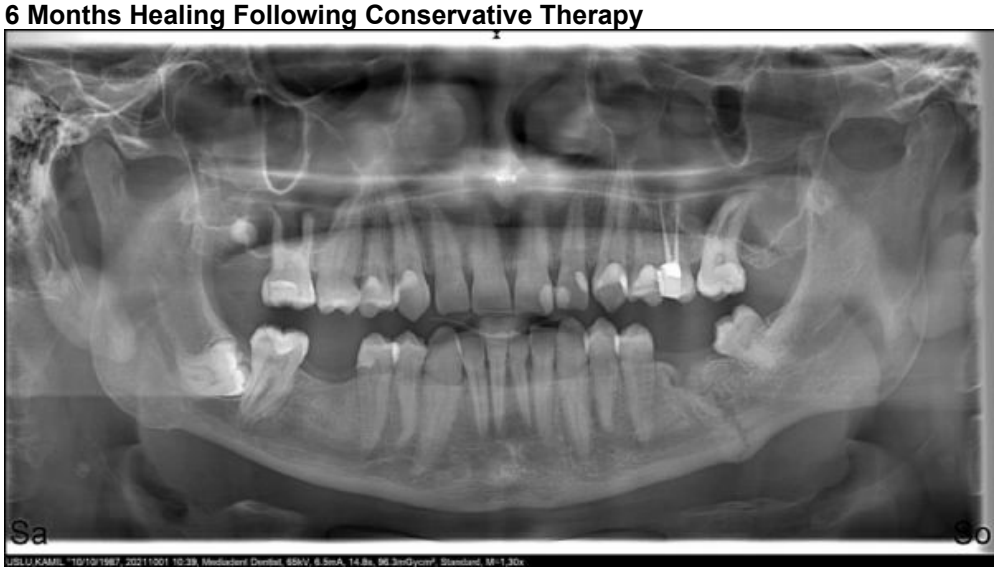
Objective: Osteogenesis imperfecta (OI) is a group of inherited disorders characterized by low bone mass, bone fragility and bone fracture. Bone, sclera, tendon and ligament are the main structures which contain type 1 collagen. Therefore, the first signs and symptoms of OI are related to these structures. Patients with OI commonly suffer from long bone fractures due to mechanical loading. Facial fractures are very rare in patients with such disorder.

Case: A 34-year-old male patient was consulted to our clinic with complaints of severe pain and paresthesia in the left mandible after the extraction of the left mandibular first molar. Orto-panoramic radiography and Cone-Beam Computed Tomography (CBCT) showed an isolated left mandible body fracture involving the extraction socket. Conservative treatment was preferred considering the systemic condition of the patient. The patient was advised to protect the mandible from trauma and to be fed with a soft diet. During the 6-month follow-up of the patient, no clinical or radiological features of malocclusion were observed.

Conclusion: Iatrogenic fracture can be minimized by careful evaluation of the patient before tooth extraction. From clinical point of view, patients with OI suffer from fragile bones. Therefore, it is recommended sectioning the tooth to prevent excessive force applied to the bone during tooth extraction.

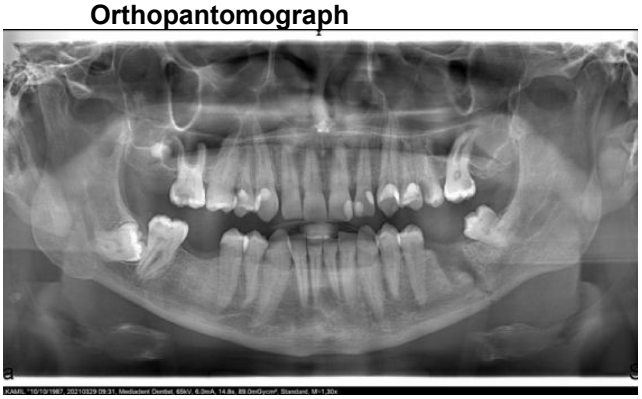
Keywords: Fracture, Osteogenesis Imperfecta

6 Months Healing Following Conservative Therapy

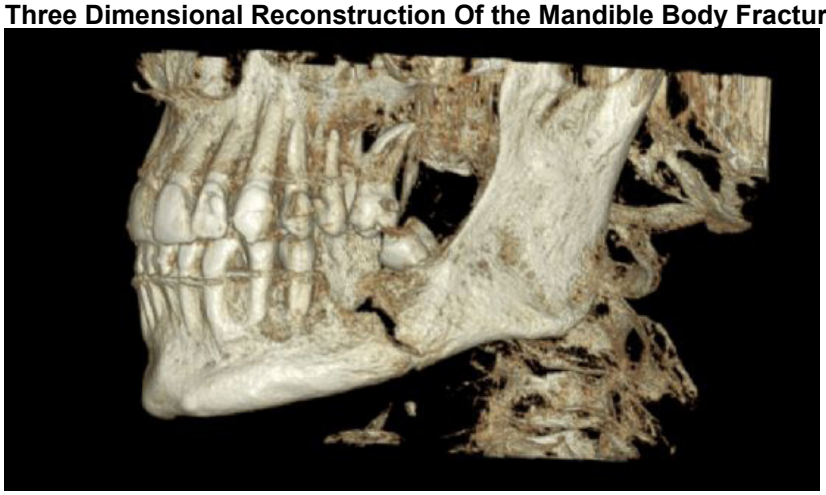


Blue sclera

Left Mandible Body Fracture Shown at Orthopantomograph



Three Dimensional Reconstruction Of the Mandible Body Fracture



Unchanged Occlusion (6 Months Following Conservative Therapy)

PP-47
Radicular Cyst: A Case Report

Bahadır Sancar, İrfan Üstündağ, Yunus Çetiner
Department of Oral and Maxillofacial Surgery, Inonu University Faculty of Dentistry Malatya

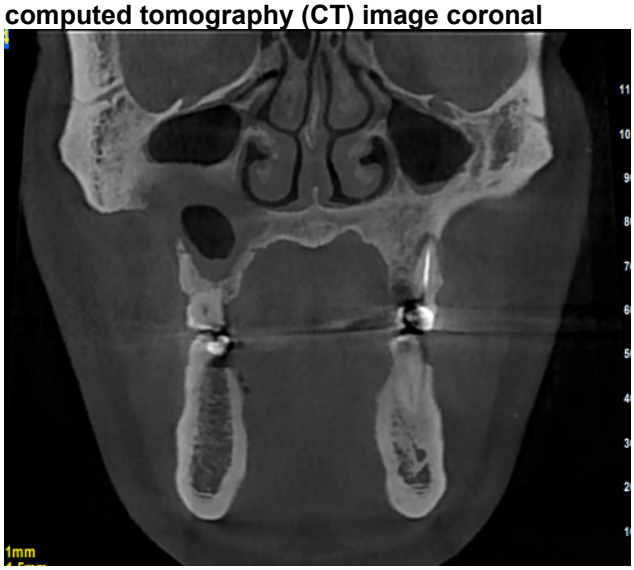
Objective: Odontogenic cysts are generally divided into two classes as developmental and inflammatory. It is the most common radicular cyst among the inflammatory odontogenic cysts. Radicular cysts are more common in the anterior maxilla. In cases where it is observed in the posterior maxilla, the root of the devital tooth, which causes the development of the cyst, is in the maxillary sinus, causing the infection to spread to the maxillary sinus.

Case: A 36-year-old male without any systemic disease was admitted to our clinic with complaints of pain and swelling in the posterior region of the right maxilla. radiographic evaluation revealed a cystic lesion resembling a radicular cyst related to the roots of the right maxillary first molar, second premolar and first premolar teeth, encompassing the maxillary sinus with root resorption. The patient was operated under general anesthesia. A straight incision was made from the crest up to the maxillary posterior Associated teeth were extracted. The cystic lesion was enucleated. The flap was sutured primarily with a 3/0 resorbable suture. Histopathological examination confirmed the lesion as a radicular cyst. The patient was prescribed analgesic and antibiotic drugs postoperatively.The follow-up of the patient, who did not have any complications in the postoperative period, continues.

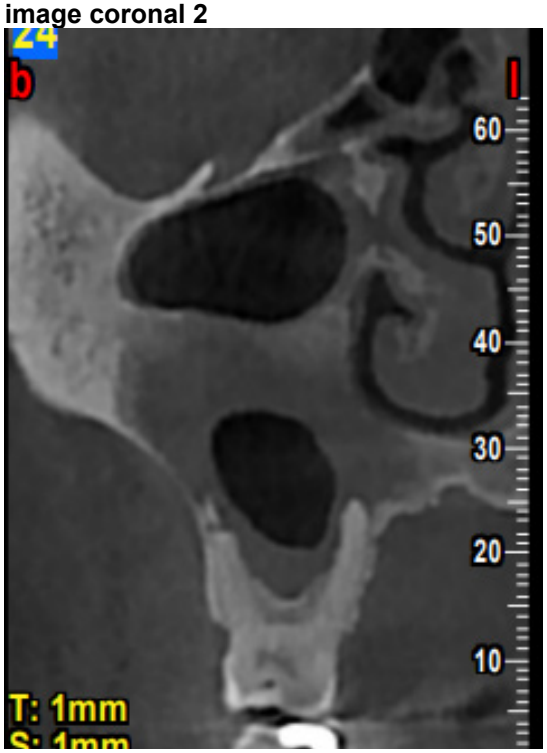
Conclusion: Radicular cysts are diagnosed during routine radiographic examinations or after the appearance of acute symptoms. It should be considered in the differential diagnosis of cases involving maxillary sinus.The recommended treatment option for radicular cysts is surgical enucleation of the cyst with root canal treatment or extraction of the involved tooth.

Keywords: Radicular Cyst, Enucleation

computed tomography (CT) image coronal



computed tomography (CT) image coronal 2



intraop Primary closure of the mucosa-image

Intraoral view of the radicular cyst, including the maxillary sinus

Post-op10th day image

PP-48
Recurrent Fibrosis Hyperplasia, Ulcerative Granulation Tissue That Suggests a Possible Malignancy

Cansu Sahin[1], Faysal Ugurlu[1], Ahmet Usame Cicek[1], Merva Soluk Tekkesin[2]
[1]Marmara University School of Denstiry Department of Oral and Maxillofacial Surgery
[2]Istanbul University Institute of Oncology

Objective: The follow-up process and treatment of the case that resulted in inflammatory fibrosis hyperplasia and granulation tissue in histopathological examinations performed as a result of repeated biopsies with high suspicion of malignancy will be presented.

Case: Rapidly growing, painless, ulcerative lesions in the oral cavity raise suspicion of malignancy. Definitive diagnosis can only be made by histopathological examination. If adequate treatment and follow-up is not performed, the risk of local recurrence and metastasis is high. A 41-year-old male patient without any systemic disease was admitted to an external centre with an ulcerative-looking lesion in the posterior right mandible. His histopathological examination as a result of excisional biopsy taken from the patient was defined as 'inflammatory granulation tissue, dense fibrinoid' necrosis. Excisional biopsy was planned under local anaesthesia for the patient who applied to our faculty with the same complaint from the same region. Histopathological examination similarly resulted in 'inflammatory fibrosis hyperplasia, intense vascular proliferation, ulcer'. Recurrence of the same character was detected in the same region within one week. Marginal resection was planned under general anaesthesia.

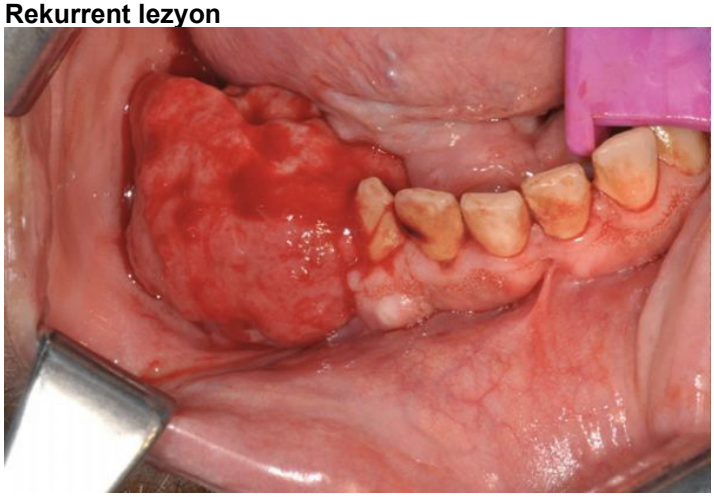
Conclusion: Repeated excisional biopsies and histopathological examinations after resection resulted in inflammation, granulation tissue, and vascular proliferation. There was no recurrence in the control examination. The patient was followed closely in case of possible recurrence. There were no recurrance occur an the end of the 6 months follow up.

Keywords: fibrosis, recurrent, ulcerative

İlk başvuru

Lezyon

Rekurrent lezyon



PP-49
Surgical treatment of Pleomorphic adenomas located at hard palate: Two case reports

Selen Adiloğlu, Ilgın Arı, Görkem Taşkıran, Turgay Kasap, Alper Aktaş
Oral And Maxillofacial Surgery, School Of Dentistry, Hacettepe University, Ankara / Turkey

Objective: Pleomorphic adenoma is a benign mixed tumor originating from myoepithelial and epithelial cells. It is separated from the surrounding tissues by a fibrous capsule. It is the most common salivary gland tumor that constitutes 40% of all salivary gland tumors and 70% of benign tumors.

Case: Two female patients, aged 33 and 48 years, who referred to our clinic, were diagnosed with non-erythematous, non-ulcerous lesions in the palatal region of the maxilla. One of these lesions was located in the right maxillary palatal region and the other was located at the junction of the hard-soft palate. In the radiological imaging, any destruction was not observed at computed tomography. Enucleation procedure was planned for both lesions. The lesions were excised up to the periosteum, including the surrounding intact tissue, together with the overlying mucosa. Then, zeroform paste was sutured on excision site and the patient was followed for secondary healing. Recurrence and anyother complication was not encountered in the follow-ups periods.

Conclusion: Surgical excision is most preferable treatment option for pleomorphic adenomas. In tumors located at hard palate, it is usually excised up to the periosteum, including the overlying mucosa for reducing recurrence. The success rate is over 95% with adequate surgical treatment. Recurrence is rare. Especially in the recurrence of large gland tumors, radiotherapy can be used as an adjunctive treatment option.

Keywords: Palate, Pleomorphıc Adenoma, Salivary Gland Tumor

PP-50
Treatment of Inflammatory Hyperplasia Related to a Fixed Implant Supported Prosthesis: Case Report

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Department of Oral And Maxillofacial Surgery, Faculty of Dentistry, Kutahya Health Science University, Kutahya / Türkiye

Objective: Hyperplasia of the peri-implant tissues is common in clinical practice. Chronic trauma, poor oral hygiene, framework misfit, dead space beneath frameworks, and a lack of attached gingivae may contribute to the development of these lesions. Some other factors may increase the risk of occurrence and severity of the lesions, such as medications and systemic diseases, especially in elderly patients. In this case, we describe the successful treatment of inflammatory hyperplasia related to a fixed implant-supported prosthesis with a non-surgical approach.

Case: A 86-year-old female patient with multiple systemic diseases was referred to our department from the intensive care unit after 4 weeks of treatments for septicemia. The patient had complained of pain in the lower jaw. The patient has been using a fixed lower-arch implant-supported prosthesis placed two years ago without any control visits. Intraoral examination shows an extensive inflammatory hyperplastic lesion in the gingiva and around the implant-supported prosthesis. The prosthesis was removed and the healing abutments were placed. A special mouthwash by mixing antibiotics, local anesthetics, corticosteroids, antihistamines, and distilled water was prepared for the patient. The patient has used this mouthwash three times a day for two weeks. At the end of 2 weeks, the lesions were disappeared completely and the gingival tissue healing was uneventful.

Conclusion: Implant-supported restorations are a common treatment. However, short and long-term biological and mechanical complications can occur. The non-surgical approach could use as an alternative to surgical treatment such as gingivoplasty or gingivectomy in case of gingival hyperplasia.

Keywords: Inflammatory epithelial hyperplasia, Gingival enlargement, Implant-supported prosthesis

Fig. 1: Ortopantomography

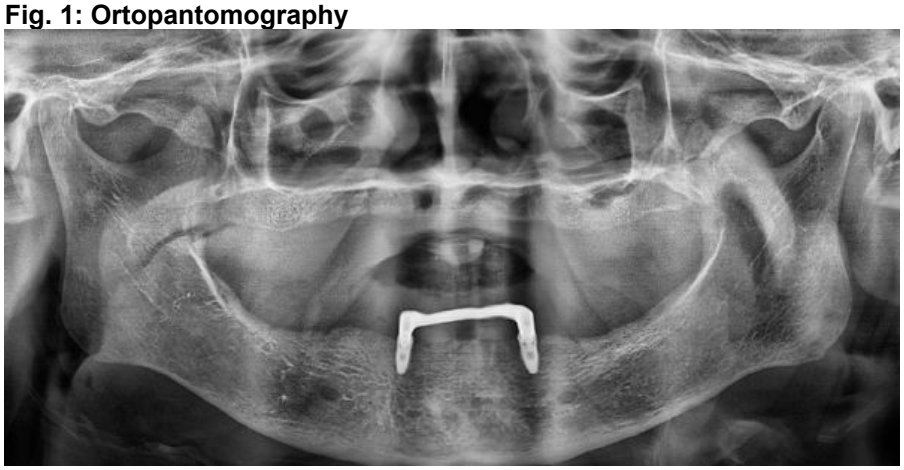


Fig. 1: Ortopantomography

Fig. 2: Initial intraoral view

Fig. 2: Initial intraoral view

Fig. 3: post-operative view after one week of using mouthwash

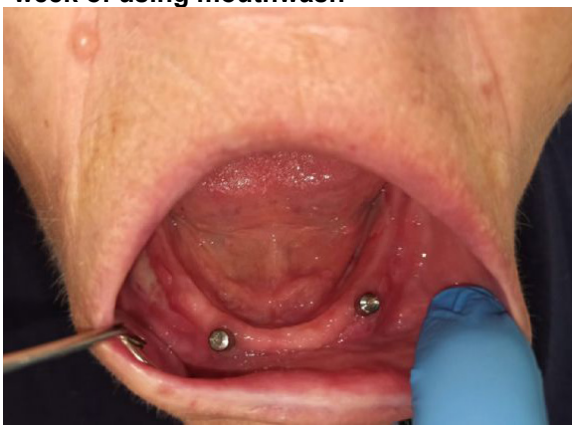


Fig. 3: post-operative view after one week of using mouthwash.

Fig. 4: post-operative view after two week of using mouthwash

Fig. 4: post-operative view after two weeks of using mouthwash.

PP-51
Conservative Treatment of Unicystic Ameloblastoma Case

Mehmet Cemal Akay, Umut Can Şimşek, Burak Borlu, İrem Yaman
Ege University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery

Objective: Ameloblastoma is a locally aggressive benign tumoral lesion that is frequently seen in the posterior region of the mandible. Although the classical treatment method is radical surgery, there are many case reports proving that conservative treatment is successful in unicystic lesions. The purpose of this case report is to present the treatment of a case of unicystic ameloblastoma.

Case: A 24-year-old systemically healthy male patient was referred to our clinic from an external center. It was seen that the lesion starting from tooth 34 and extending to the angulus, resorbed the roots of teeth 36 and 37, tooth 38 was impacted in the mesioangular position. In the axial sections of three-dimensional imaging, it was observed that the lesion had an expansive character and completely resorbed the lingual cortex. Operation was performed under local anesthesia, the lesion was completely excised and peripheral ostectomy was performed. An osteosynthesis plate was adapted to support the tensile forces created by the masticatory muscles due to the thinning of the cortical bone in the base and buccal side of the mandible. The lesion cavity was filled with concentrated growth factor and xenograft and covered with a membrane. As a result of the 8-month follow-up, no symptoms and recurrences were observed. Dental implant treatment is planned for the existing area.

Conclusion: If success can be achieved with conservative treatment in ameloblastoma cases, the aesthetic and function loss of the patient is minimal.

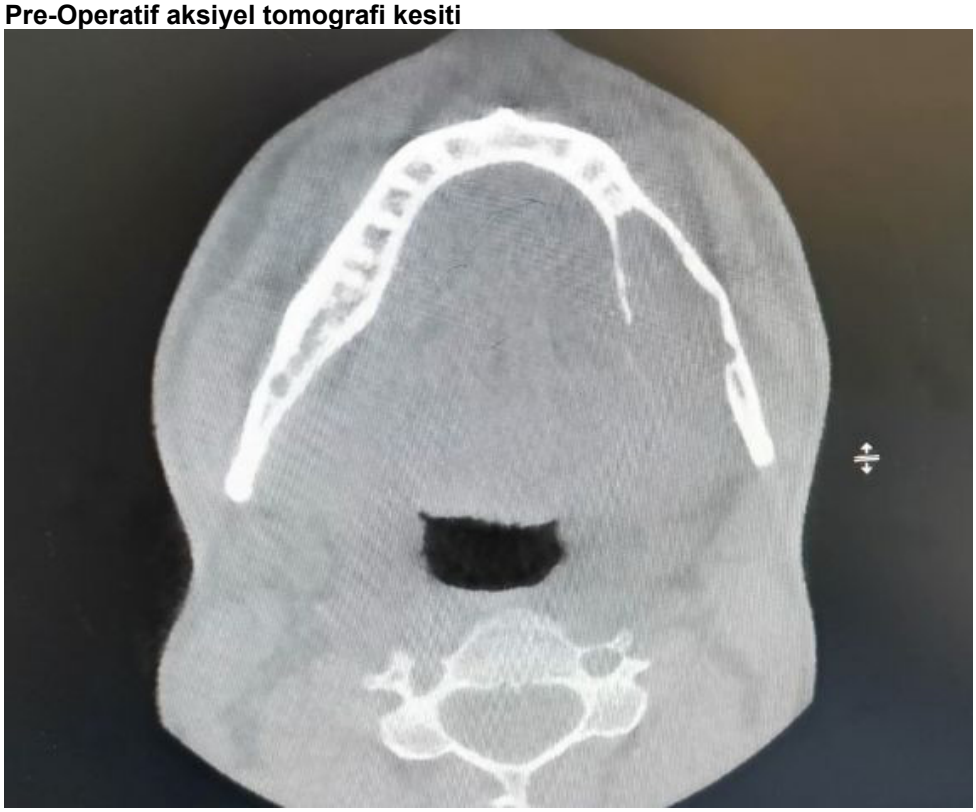
Keywords: ameloblastoma, xenograft, mini-plate

Ameloblastoma

Lezyon eksizyonu sonrası mini-plak ve vida ile onarım

Post-operatif 8.ay

Pre-Operatif aksiyel tomografi kesiti



PP-52
Comparison of orthognathic surgical splints produced in different flament and resin 3D printers: a pilot study

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[1]*Oral and Maxillofacial Surgery Department, Istanbul Univercity, Istanbul, Turkey*
[2]*Private Clinic, Istanbul, Turkey*

Objective: The aim of this pilot study is to compare the dimensional stability of orthognathic surgical splints produced in 3D printers with different working principles.

Materials-Methods: For our study, CBCT data and STL models of a patient whose orthognathic surgery preparation was completed were used. In order to compare the dimensional stability of splints, 3 different thicknesses were stimulated by opening the mouth in software. prepared data were printed in a flament and 2 different resin printers. The surface of splints was digitized with 3D scanning and compared with planned STL splint data.

Results: The study continues, the findings will be shared at the congress.

Conclusion: Clinical and digital evaluations of splints were done and the question of do we need to spend thousands of dollars for a 3d printer will be answered in the presentation.

Keywords: orthognathic surgery, splint

PP-53
Odontogenic Fibromyxoma in a Myastenia Gravis Patient: 3-Year Follow up

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[1]*Oral and Maxillofacial Surgery, Cyprus Health and Social Sciences University, Faculty of Dentistry, Güzelyurt, Cyprus*
[2]*DentoMaxilloFacial Radiology, Ankara University Faculty Of Dentistry, Ankara, Turkey*

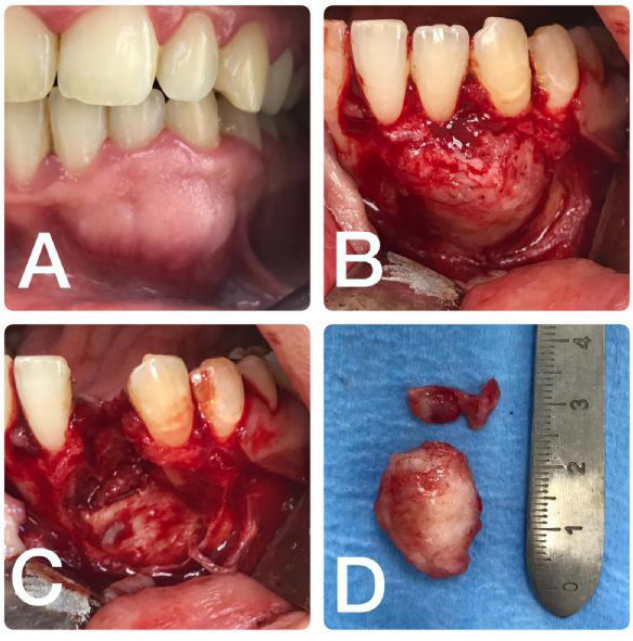
Objective: Our aim is to present the 3-year clinical and radiological follow-up of a rare case of odontogenic fibromyxoma of the jaws in a patient with myasthenia gravis.

Case: A 29-year-old female patient applied to our clinic with the complaint of painless swelling in her mouth. In the intraoral examination, a raised, painless lesion with the same color as the mucosa was seen in the anterior region of the lower jaw on the left side. In the panoramic radiograph taken, a radiolucent lesion with a diameter of 2 cm was seen that caused displacement of the tooth roots.The patient was operated under local anesthesia and total enucleation was perfgormed.The excised lesion contained a solid structure and was sent to pathology for histopathological examination After the histopathological examination of the lesion, a diagnosis of odontogenic fibromyxoma was made.No recurrence was found in the patient, whose radiological and clinical follow-up was performed for three years. It is followed by panoramic films that the tooth roots come back to their former places and the bone tissue is formed again.

Conclusion: Differential diagnosis of odontogenic fibromyxoma, which is rare in the jaws, should be made well and the possibility of recurrence should not be forgotten. Long-term follow-up becomes even more important in such cases.

Keywords: Myasthenia Gravis, Odontogenic fibromyxoma, Odontogenic myxofibroma

Figure 1



In Figure 1, the view of the mouth shown with A, the view after opening the flap during the operation, shown with B, the view after removal of the lesion, shown with C, and the view of the extracted tooth and the lesion with the scalpel handle, shown with D.

Figure 2

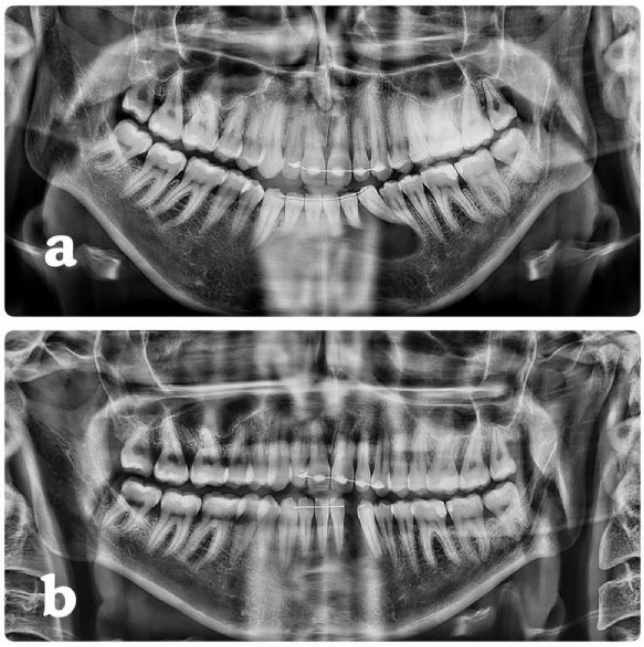


Figure 2 a is the October 2018 panoramic film that the patient first applied to us, and b is the April 2019 panoramic film.

Figure 3

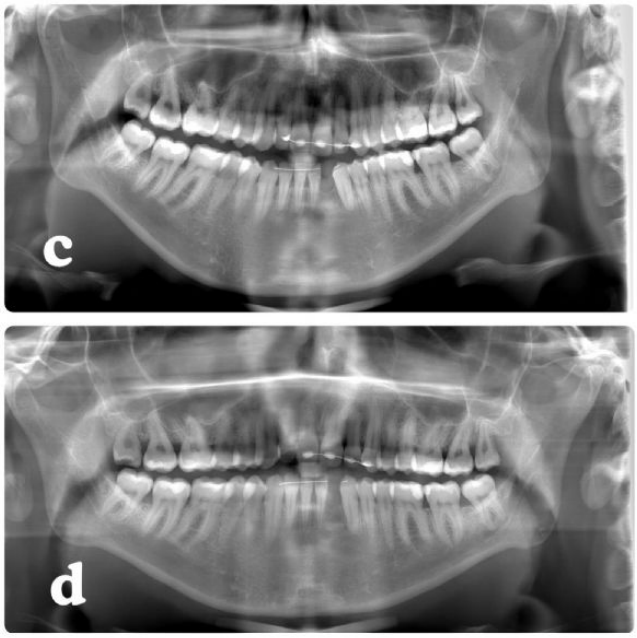


Figure 3 c is the patient's March 2021 panoramic film, d is the December 2021 panoramic film.

PP-54
Could the ratio of the second finger to the fourth finger (2D:4D) be a new morphological marker in predicting preoperative anxiety and postoperative agitation in pediatric patients?

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Ondakuz Mayıs Üniversitesi Diş Hekimliği Fakültesi Ağız Diş ve Çene Cerrahisi Anabilim Dalı

Objective: 2D:4D (the ratio of the second finger to the fourth finger) ratio has been used as a morphological marker in evaluating the relationship between androgen exposure in the prenatal period and developmental/neuropsychiatric disorders.

Materials-Methods: Ninety-one children between the ages of 5 and 10 years from whom teeth were to be extracted under local anesthesia were included in the study. Measurements were made of the second and fourth fingers of the children's right and left hands. At the end of the procedure, the physician was asked to evaluate the patient's dental anxiety levels using the Frankl Behavior Scale (FBS).

Results: Based on the FBS, the right-hand 2D:4D ratio was 0.979±0.074 in patients who refused treatment, 1.000±0.044 in unwilling patients who could not cooperate, 1.017±0.043 in cooperative patients, and 0.980±0.020 in patients with interest (p=0.092). The left-hand 2D:4D ratio was 1.024±0.045 in patients refusing treatment, 1.006±0.046 in unwilling patients who could not cooperate, 1.018±0.054 in cooperative patients, and 0.983±0.025 in patients with interest (p=0.526). No relationship was found between successful extractions and 2D:4D ratios in children.

Conclusion: As a result, no significant correlation was found between dental anxiety and 2D:4D of pediatric patients who are planned tooth extraction. It was determined that 2D:4D is not a morphological marker that we can use to predict dental anxiety in the preoperative period.

Keywords: Dental anxiety; 2D:4D; pediatric

hemodynamic data according to right and left 2D:4D ratios

	Right 2D:4D<1	Right 2D:4D≥1	P	Left 2D:4D<1	Left 2D:4D≥1	P
Preoperative HR	103±13	100±20	0.213	101±15	101±20	0.724
HR after local anesthesia	123±10	105±13	0.183	103±12	129±12	0.077
Minute 5 HR	108±13	105±14	0.342	105±13	108±13	0.665
Minute 10 HR	112±11	102±10	0.638	105±11	112±14	0.607
Preoperative MAP	82±10	81±11	0.400	81±10	81±12	0.053
MAP after local anesthesia	84±12	86±11	0.592	82±11	81±13	0.106
Minute 5 MAP	78±11	79±12	0.548	78±10	79±12	0.068
Minute 10 MAP	77±9	74±10	0.979	74±8	79±12	0.497
Preoperative SpO_2	99(99-100)	99(99-100)	0.107	99(99-100)	99(97-100)	0.233
SpO_2 after local anesthesia	99(99-100)	99(99-100)	0.638	99(99-100)	99(98-100)	0.454
Minute 5 SpO_2	99(98-100)	99(99-100)	0.586	99(99-100)	99(99-100)	0.783
Minute 10 SpO_2	99(98-100)	99(99-100)	0.240	98(98-100)	99(99-100)	0.774

ramsey sedatıon score and watcha scale

Table 1. Ramsey Sedation Score and Watcha Scale

Ramsey Sedation Score	Response	Watcha Score	Response
1	Patient anxious oragigated or both	0	Asleep
2	Patient cooperative, oriented and tranquil	1	Calm
3	Patient responds to commands only	2	Crying, but can be consoled
4	A brisk response to a light glabellar tab	3	Crying, but cannot be consoled
5	Asluggish response to light glabellar tab	4	Agitated, and trashing around
6	No response		

PP-55
Reformation of Temporomandibular Joint After Total Alloplastic Temporomandibular Joint Prosthesis: A Rare Case

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[2]*Dentistry Faculty, Bahçeşehir University, Istanbul*

Objective: Anatomic structural damages of temporomandibular joints (TMJs) such as trauma, tumor, resorption, and ankylosis require removal of pathologic structures and reconstruction of TMJs. The goals of TMJ replacement are improved mandibular form and function, reduction of pain and disability, containment of excessive treatment and cost, and prevention of further morbidity. Alloplastic total TMJ replacement is a management option for patients with anatomically and pathologically compromised dysfunctional TMJs.

Materials-Methods: 30 year-old male patient came to private clinic with main complaint of pain at TMJ and difficulty in mouth opening. Patient was diagnosed as TMJ ankylosis. Heterotropic ossification was the cause of the TMJ ankylosis. Condylectomy, coronoidectomy, gap arthroplasty, lefort 1 surgery, genioplasty and iliac bone graft surgery (left upper jaw) were performed. Total alloplastic bilateral TMJ prosthesis was placed via submandibular and endaural approach.

Results: Reformation of bilateral TMJ was detected 3 years follow up.

Conclusion: Despite condylectomy, coronoidectomy and radical gap arthroplasty, the reformation of tme components is a very rare case.

Keywords: Tmj prosthesis, Reformation

Post-op Panoramik Röntgen

Post-op 3 yıl sonraki kondil ve koronoidin tekrar olduğunu gösteren Panoramik röntgen

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PP-56
Treatment of a patient with multiple TMJ dislocation episodes with TMJ prolotherapy: A case report

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Objective: Temporomandibular joint (TMJ) dislocation or hypermobility is defined as abnormal displacement of the condyle. This study, it was aimed to present the treatment of a patient with dextrose prolotherapy who underwent reduction under general anesthesia 17 times in a month due to multiple TMJ dislocations.

Case: A 26-year-old female patient with TMJ hypermobility was referred to Kocaeli University Department of Oral and Maxillofacial Surgery with severe TMJ dislocations. The patient's maximum mouth opening was 47 mm, and the amount of lateral movement was approximately 14 mm. The patient defined that her TMJ dislocations 18 or 19 times a month during his daily activities, and mandible repositioned many times under general anesthesia in a different hospital. The patient received 4 sessions of bilateral TMJ dextrose prolotherapy at 6-week intervals. TMJ dislocation episodes showed complete regression after treatment. There were no complications in the patient due to prolotherapy sessions.

Conclusion: Dextrose prolotherapy is a safe treatment method that treats patients with TMJ hypermobility without further surgical procedures.

Keywords: dislocation, prolotherapy, temporomandibular joint

PP-57
Five years follow-up of a Mandibular Odontogenic Keratocyst Treated by Two-stage Approach: A Case Report

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[2]*Department Of Oral And Maxillofacial Surgery, Gulhane Faculty Of Dentistry, Health Science University, Ankara / Türkiye*

Objective: Odontogenic keratocyst (OKC) is a developmental odontogenic lesion originating from the dental lamina. This lesion could be associated with an impacted third molar. Decompression or marsupialization are conservative options in the treatment of OKC. In this case report, we present a satisfactory management of a mandibular OKC by enucleation following the decompression.

Case: A 32-year-old male was admitted to our department with the complaint of pain and paresthesia on the right side of the mandibula. Radiographic examination shows multilocular radiolucency associated with an impacted third molar and extended to the right mandibular ramus. In the evaluation of computerized tomography, the inferior alveolar nerve was appear in direct contact with the cystic lesion and impacted tooth. There was no perforation in the lingual and buccal bone cortex. Following an aspiration biopsy, decompression was completed using a modified plastic dental syringe. The enucleation and extraction of the associated tooth was done six weeks after decompression. The histopathological evaluation confirmed that the lesion was an odontogenic keratocyst. The five-year follow-up of the patient was uneventful without any recurrence.

Conclusion: Decompression protocol for OKC offers a conservative and effective option with low morbidity and recurrence rates. In addition, after decompression, the epithelial wall of cystic lesion tends to become thicker, which facilitated its complete removal in the second surgery. As a result, we concluded that these procedures could be seen as less traumatic, and could be decreased the risk of injury to the inferior alveolar nerve and other anatomical structures.

Keywords: Decompression, Odontogenic keratocysts, Jaw tumors

Figure 1

Initial orthopantomograph (OPG). Red dots identify the cyst margins predicted.

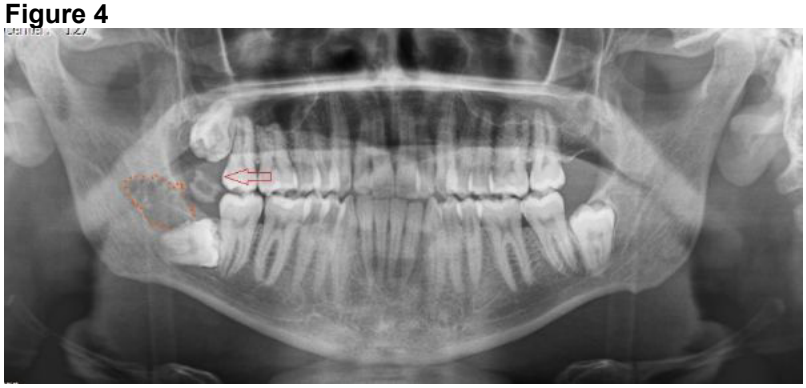
Figure 2

The modified plastic dental syringe used for decompression. Holes were made on the dental syringe in order to allow drainage from all side of the lesion.

Figure 3

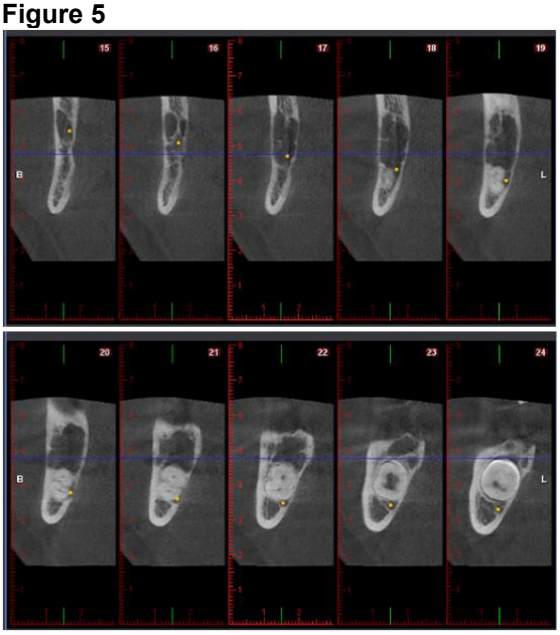
Postoperative intraoral view of the modified dental syringe placed. It was covered with the tip of plunger keeping clean the cyst cavity from oral food residues, and also for regular irrigation of the cyst cavity.

Figure 4



Orthopantomography (OPG) view at 4 weeks following decompression. Red dots identify the cyst margins/ The red arrow shows the tip of the dental syringe plunger that used as a cover.

Figure 5



Preoperative cross-sectional views of CBCT are showing the position of inferior alveolar nerve (IAN), cystic lesion, and impacted tooth.

Figure 6

Orthopantomography (OPG) view of the patient five years postoperatively.

PP-58
Surgical Management of Mandibular Third Molar Root Displaced in The Submandibular Space: A Case Report

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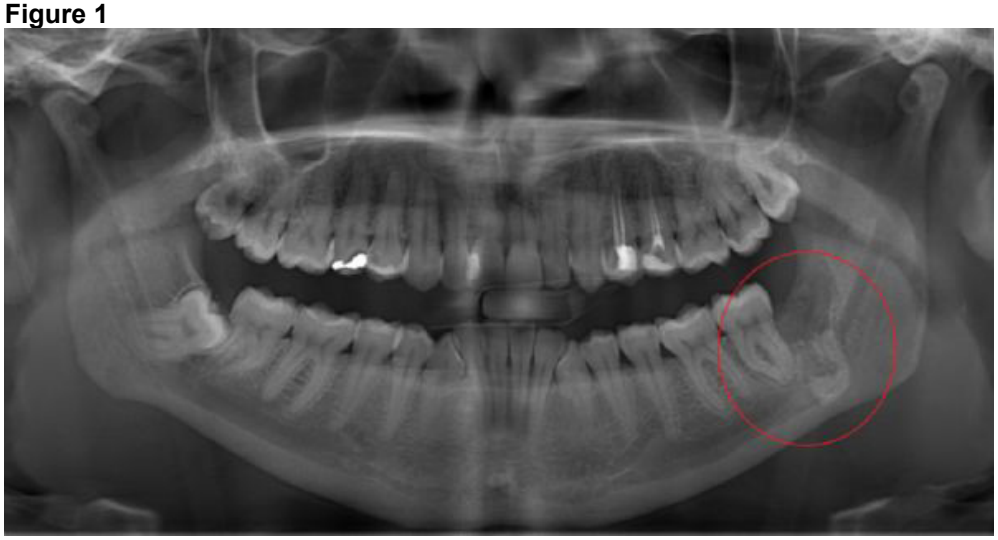
Objective: Surgical removal of mandibular third molars is one of the most frequently performed procedures in oral surgery. Accidental displacement of teeth or roots into the fascial spaces is a rare complication. In this case, we present the surgical management of mandibular third molar root displaced in the submandibular space by intraoral lingual surgical approach under general anesthesia.

Case: A 30-year-old female patient has been admitted to our clinic with complaints of paresthesia and pain in the left mandibular region. The patient had undergone a traumatic experience during the surgical extraction of mandibular left third molar two week ago performed by a general dentist. Clinical examination showed swelling and tenderness on left floor of the mouth. Panoramic x-ray and cone-beam computed tomography revealed lingual plate fracture and the location of the root in the submandibular space. The fractured bone piece and displaced root was removed under general anesthesia. Three months postoperative follow-up of the patient was uneventful and It was observed that symptoms of paraesthesia were completely resolved.

Conclusion: The intraoperative surgical complications with third molar surgery considered to be associated with various risk factors, including tooth position, the presence of a lingual plate fracture, excessive or uncontrolled force, lack of operator expertise, and poor clinical or radiological assessment. Adequate clinical and radiological assessment should be performed before proceeding with third molar surgery and an experienced surgeon should be consulted to avoid complications.

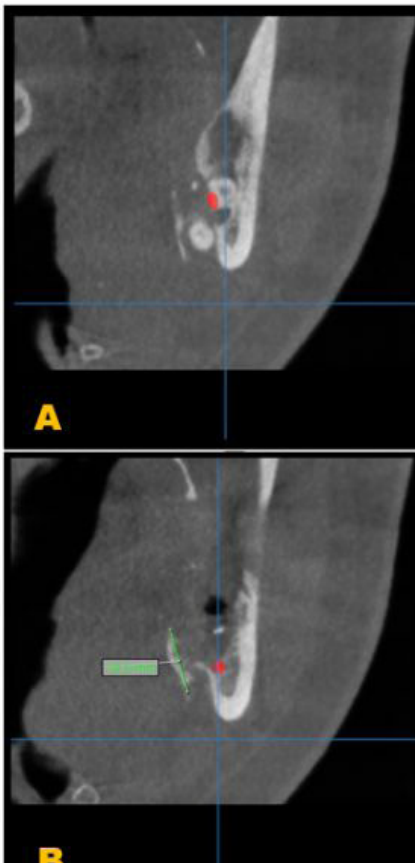
Keywords: Submandibular space, Surgery complications, Root displacement

Figure 1



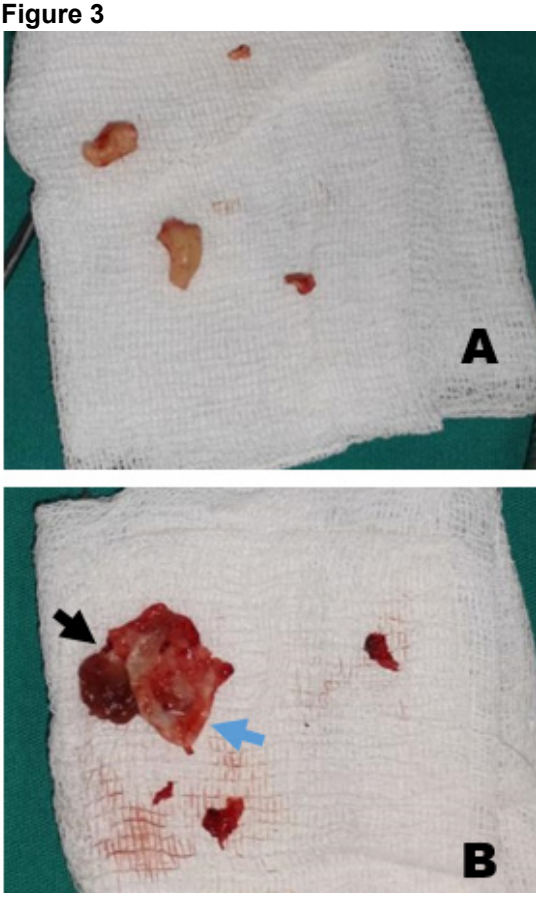
Panoramic view of the patient shows the presence of the roots in the submandibular region.

Figure 2



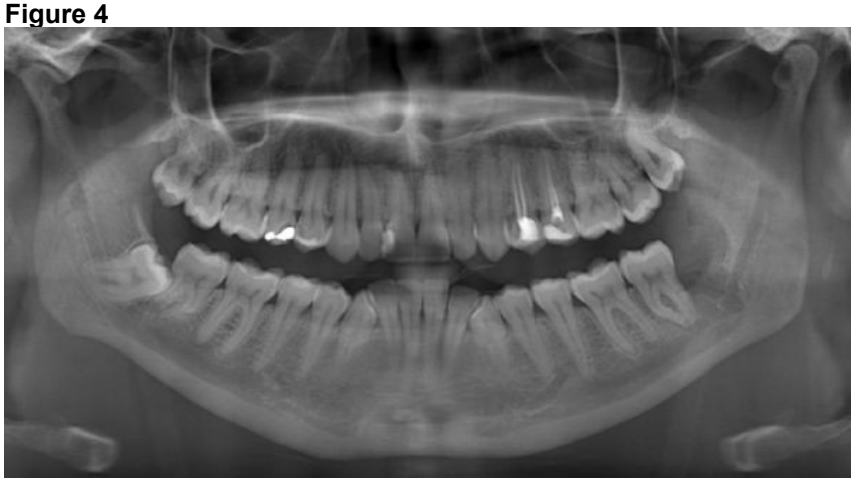
*Cross-sectional view of CBCT shows (A) the presence of the roots in the submandibular region and (B) view of the 12*10 mm fractured lingual cortical plate.*

Figure 3



A Retrieved roots, and B fractured lingual cortical fragment (black arrow) with attached muscle (blue arrow).

Figure 4



Post-operative panoramic view of the patient.

PP-59
Recurrent Cemento-Ossifying Fibroma in a Pediatric Patient With Mediastinal Ganglioneuroma

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[2]*Department of Oral And Maxillofacial Surgery, Gulhane Faculty of Dentistry, Health Science University, Ankara / Türkiye*

Objective: Cemento-ossifying fibroma (COF) is classified into fibro-osseous lesions which are more prevalent in females between 30 and 40 years old. Ganglioneuroma (GN) is the most differentiated of the rare benign neuroblastic tumors. In this case report, the authors report a rare presentation of COF that could be confused with GN.

Case: A six-year-old girl was referred to our department for examination of painless swelling on the left mandibular region. The swelling has seemed to be gradually growing for 2 months. The patient had a history of mediastinal GN. An excisional biopsy, was planned and carried out. The histopathology report showed that it was a COF. In addition, in the gene screening of the patient, her predisposition to the development of a cancer seemed possible. So, the patient should be followed up at regular intervals throughout life. One year later, recurrence was seen in the biopsy area. Another more comprehensive surgery was planned for the patient. The parents of the patient were informed about the planned enucleation and resection. Their decision is still awaited.

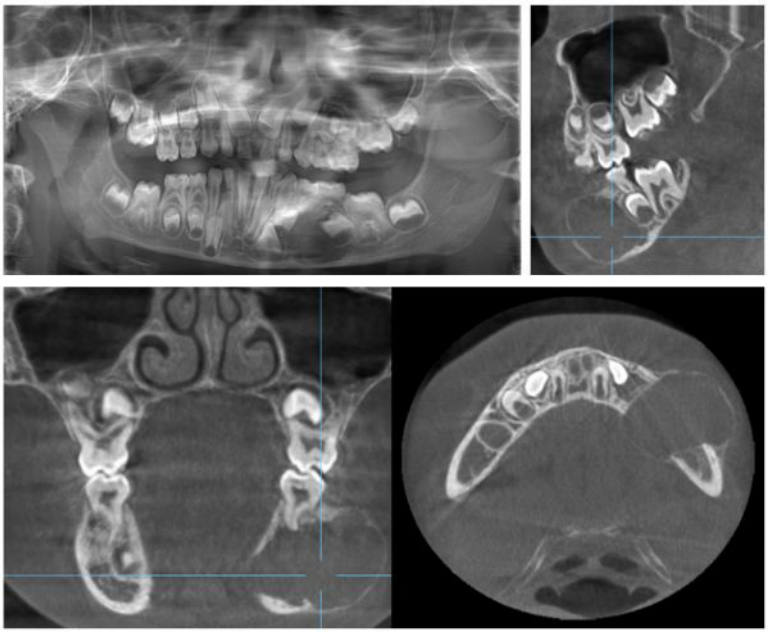
Conclusion: The choice treatment for COF is conservative surgery with long-term follow-up. In our case, the patient was younger than the reported range of the age for COF. Furthermore, the patient had a history of GN. For these reasons, the lesion could be misinterpreted. The results of the treatment would be predicted following only a correct diagnosis. Maxillofacial lesions should not only be evaluated locally but also should be considered associated cancers and syndromes with.

Keywords: Cemento-Ossifying Fibroma, Ganglioneuroma, Oral Pathology

Figure 1

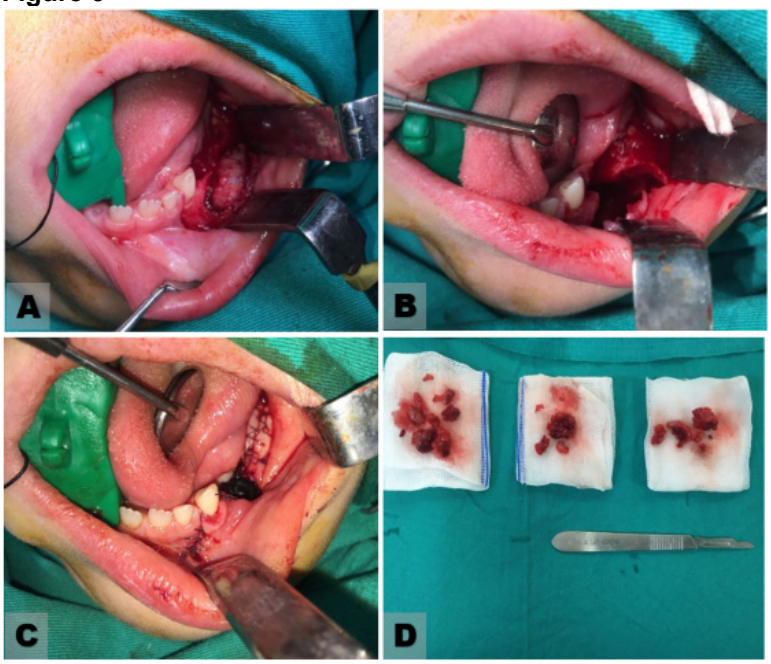
Preoperative facial views of the patient show a facial asymmetry on the left side of the mandibular corpus area.

Figure 2



Preoperative OPG (orthopantomography) and CBCT (cone beam computerized tomography) images.

Figure 3



A. Intraoperative view of the lesion, B. Bone cavity following the excisional biopsy C. Placing of a marsupialization tube, D. Multiple pieces of the enucleated lesion.

Figure 4

Postoperative facial and OPG views of the patient 19 months after the operation.

Figure 5

Postoperative OPG obtained at 22 months following the operation shows a recurrence of the lesion.

PP-60
Removal of the internal fixation materials 11 years after their insertion: A case report

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Objective: Open reduction internal fixation has been successfully applied for many years in maxillo-facial traumas. It was aimed to present a case in which the internal fixation materials were removed due to infection and discomfort 11 years after insertion.

Case: A 38 years old male patient who had a motorcycle accident 11 years ago without any systemic disease was admitted to our clinic with complaints of intraoral fistulas and extraoral swelling of the plates that were placed due to trauma. A large number of mini-plates, mini-screws, micro-plates, and micro-screws were seen in the radiological examination. The exact quantities of the plates and screws could not be determined due to artifacts. Fixation materials were removed with both intraoral and extraoral approaches under general anesthesia. Extra-oral incisions were made over the lines applied after trauma in order not to create additional scars in the patient. The control radiograph was taken after the procedure, and two intraosseous fixation screws were seen. Due to artifacts, today's imaging methods may sometimes be insufficient during the planning phase. This may lead to missed fixation fragments that were previously broken in some bone areas, especially if intra-operative imaging is not available. Uneventful healing was observed.

Conclusion: Even though many years can pass since their placement, the fixation materials may have to be removed because they may create problems in the patients. For this purpose, following the incision lines applied previously provides convenience in terms of accessing the placement angles of the screws.

Keywords: fixation materials, infection, removal

PP-61
Management of Traumatically Avulsed and Intruded Permanent Teeth In The Maxillary Anterior Region: A Case Report

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Objective: Dentoalveolar trauma is a major cause of tooth loss. Avulsion, intrusion, luxation, crown, and root fracture are the injuries to primary and permanent dentition. Avulsion of permanent teeth is very important in terms of aesthetics and function. Prompt and accurate intervention is required for successful treatment.

Case: a 45-year-old male patient was referred to our clinic for evaluation of injury to the maxillary anterior region as a result of a fall on the ground. During anamnesis, it was learned that avulsed teeth were kept at home on a napkin. The patient accompanying person was asked to quickly bring those teeth inside the milk. In the clinical examination, there was bilateral canine and upper left lateral tooth intrusion and avulsion of the upper incisors with upper right lateral tooth. The avulsed teeth remained outside the mouth for approximately 14 hours. Under local anesthesia surgical extrusion of intruded teeth and reimplantation of all avulsed teeth were performed. All avulsed and intruded teeth were splinted by using composite and 0.4 wire. After adequate immobilization was achieved, root canal treatment was performed for all traumatized teeth. Following the healing of soft and hard tissues, all necessary teeth were restored with metal-supported porcelain crowns. The patient was included in the regular follow-up program. No aesthetic or functional problems were encountered.

Conclusion: Prompt intervention in dental trauma cases can be rehabilitated patient's aesthetics, function, and phonation. Thus, a simple, natural, and inexpensive treatment could be provided without the need for more complex and expensive treatments.

Keywords: Dental Trauma, Teeth avulsion, Teeth intrusion

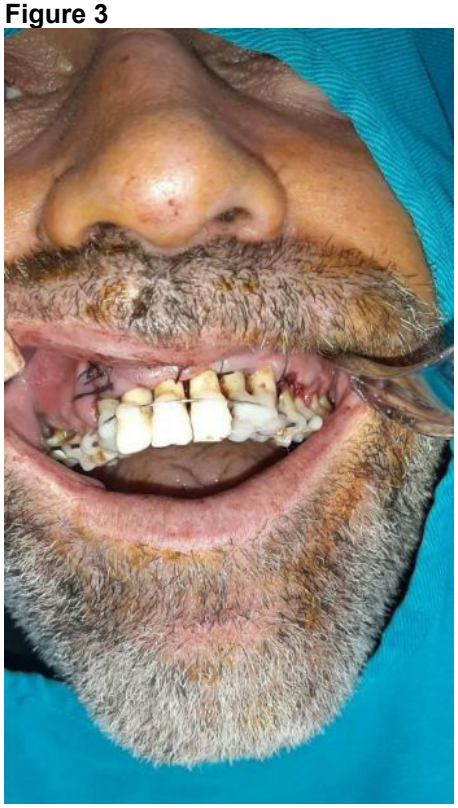
Figure 1

Initial intraoral view of patient.

Figure 2

Perioperative patient orthopantomography image.

Figure 3

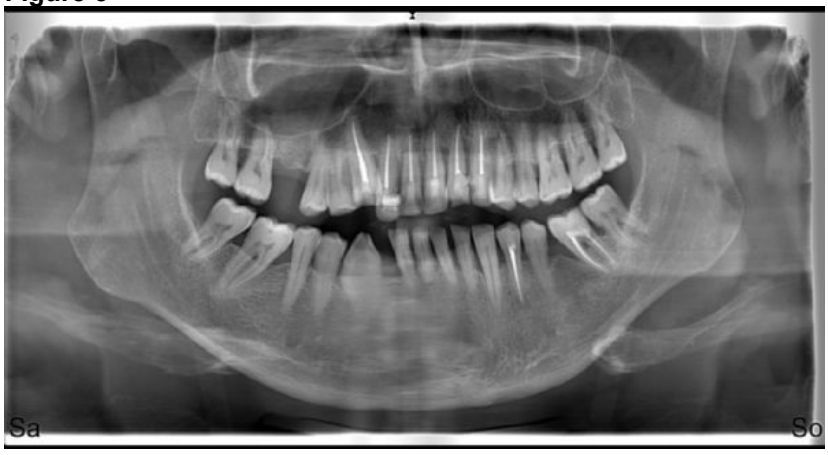


Postoperative intraoral view of the traumatized teeth after splinting with composite and 0.4 wire.

Figure 4

Postoperative intraoral view of the traumatized teeth after removing of dental splint wire.

Figure 5



Orthopantomography view at 12 weeks following treatment.

PP-62
Tentpole Technique for Bone Regeneration in Vertically and Horizontally Deficient Maxillary Alveolar Ridges: A Case Report

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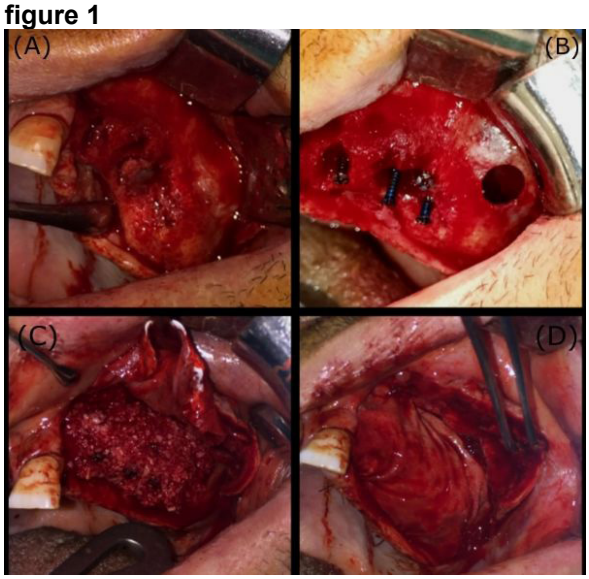
Objective: Ridge augmentation is usually required for successful oral rehabilitation. Various methods for horizontal and vertical bone augmentation have been described in literature.The tentpole technique is one of the methods available for practitioners to perform horizontal and vertical ridge augmentation to facilitate dental implant placement. In this case report, the tentpole technique applied to a patient who did not have sufficient horizontal and vertical bone levels for dental implant treatment in the maxillary posterior region is presented.

Case: A 44-year-old healthy male patient was operated on under general anesthesia. Crestal incision and releasing incisions were placed, and the mucoperiosteal flap was elevated to expose the defect. 4 titanium screws (1.2mm * 12 mm) were placed. 2.5 cc corticocancellous allograft placed around the tenting screws to cover up to the screw head. A resorbable pericardium membrane was then placed over the screws and grafted site. Maxillary sinus augmentation was also performed on the same side in the same session. The wound was closed using silk sutures after creating a periosteal release in the vestibule for tension-free closure. Control CBCT image was taken at six months postoperatively. According to the measurements made in preoperative and postoperative tomography, an increase in the amount of vertical and horizontal bone was observed. Preoperative vertical height was 4.90 mm, and postoperative vertical height was 12.35 mm. Horizontally, it was measured as 1.23 mm preoperatively and 9.82 mm postoperatively.

Conclusion: Tentpole technique can give useful and effective results in horizontal and vertical bone lifting operations.

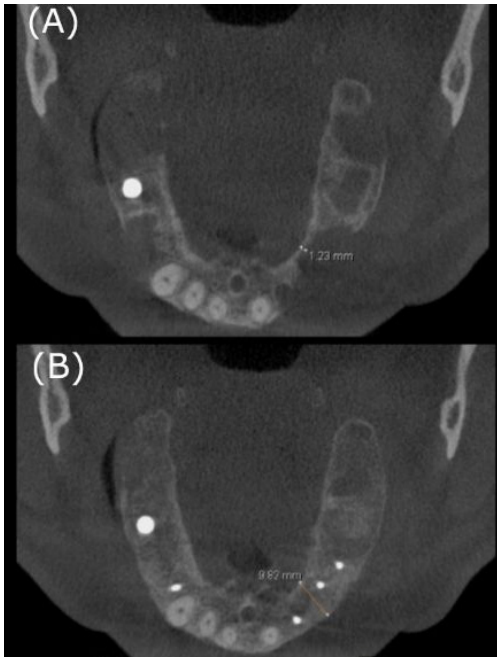
Keywords: bone augmentation, tentpole technique

figure 1



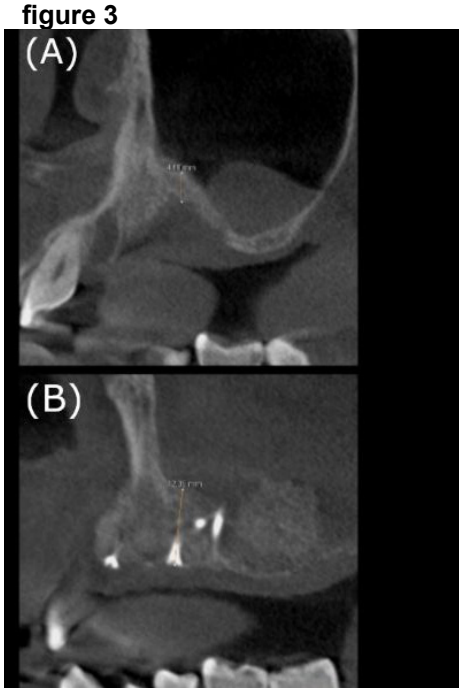
A,defect area;B,four titanium screws were inserted;C,allograft was placed on the defect area;D,resorbable pericardium membrane was placed over the screws and grafted site

figure 2



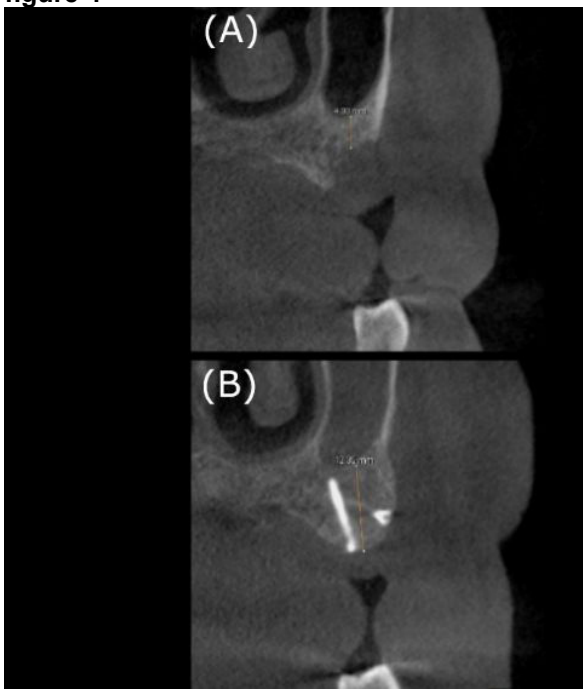
A,preoperative CBCT axial section; B,CBCT axial section at postoperative sixth month

figure 3



A,preoperative CBCT sagittal section; B,CBCT sagittal section at postoperative sixth month

figure 4



A,preoperative CBCT coronal section;B,CBCT coronal section at postoperative sixth month

PP-63
Combined Management of a Large Mandibular Central Giant Cell Granuloma: A Case Report

Mohammad Nabi Basiry, Aykut Saylıg, Tugba Turel Yucel
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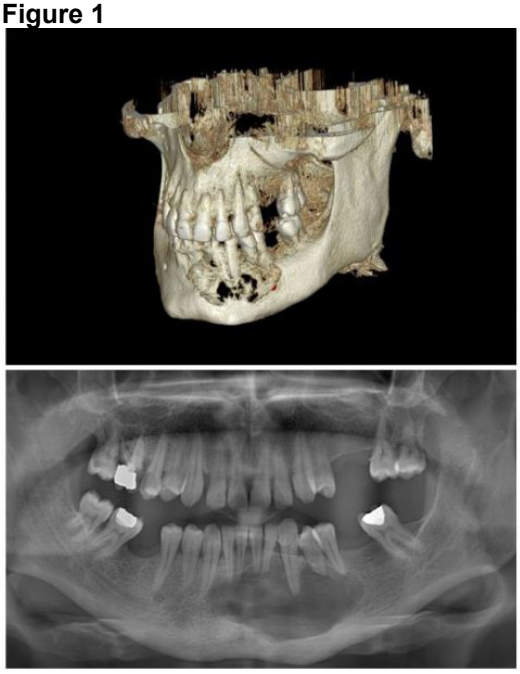
Objective: Central giant cell granuloma (CGCG) is a benign and frequently recurring lesion. Alternative approaches like surgical curettage, cryotherapy, and intralesional injections with corticosteroids are used for the treatment of CGCG.

Case: A 38 years-old male patient was admitted to our department complaining of a painless swelling in the chin region for one year. Intraoral examination shows deep biting with the abrasion on the occlusal surface of teeth as a result of bruxism. On palpation, there was a hard and smooth swelling on the apex of the left canine tooth. Panoramic radiography revealed large multilocular radiolucency in the mandibular symphysis region extending from the mandibular right canine to the left second premolar. Computerized tomography (CT) showed an extensive multilocular radiolucent lesion with cortical bone perforation on the buccal and lingual sides. An incisional biopsy revealed CGCG. Intralesional corticosteroid injections were done once a week for 6 weeks. Changes in the lesion were followed by regular orthopantomography. New bone formation was observed at the end of 8 weeks. Root canal treatment was performed on teeth associated with the lesion before the surgical procedure. The lesion was completely enucleated with apical resections of the involved tooth. No recurrence was observed in one-year follow-up.

Conclusion: Central giant cell granuloma is a devastating lesion that can rapidly destroy the bone. Combined medical and surgical management could be less traumatic in extensive aggressive lesions with the advantages of reducing the surgical defects size and loss of teeth.

Keywords: Central giant cell granuloma, Corticosteroid injection, Jaws benign tumor

Figure 1

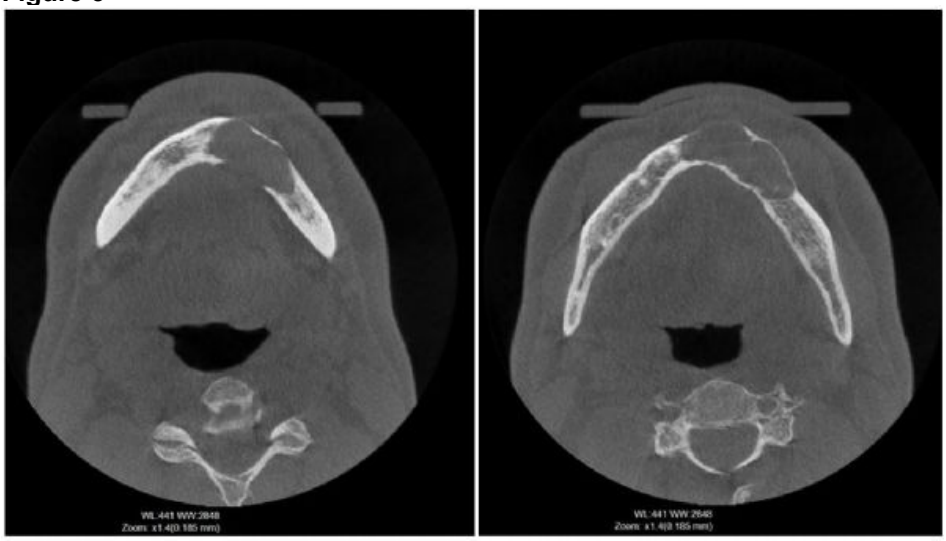


Initial orthopantomography (OPG) and 3D CBCT image.

Figure 2

Patient's intraoral view at the time of presentation.

Figure 3



Axial sections of Cone Beam Computed Tomography (CBCT) shows unilocular appearance of the lesion with erosion of both lingual and vestibular cortices.

Figure 4

OPG after 2 months of intralesional steroid injection. Note the margins of lesion obvious in comparison with initial film.

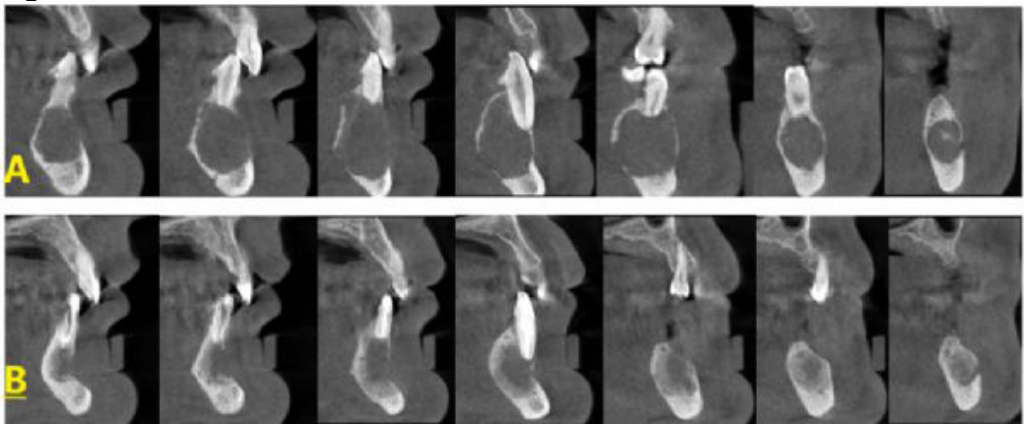
Figure 5

Intraoperative view of surgical curettage of lesion.

Figure 6

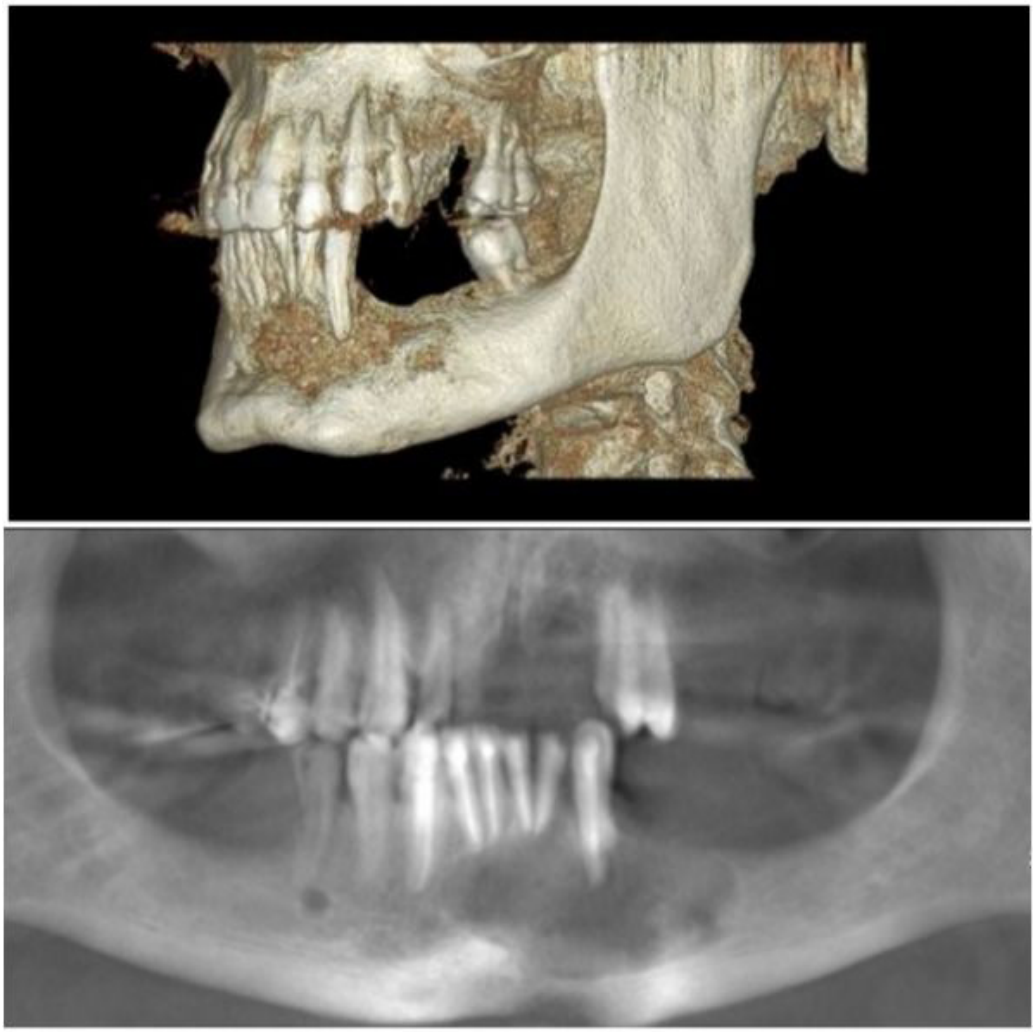
Appearance of excised lesion.

Figure 7



A, Perioperative and B, Postoperative cross-sectional views of CBCT are showing signs of increased ossification.

Figure 8



Follow-up OPG and 3D CBCT image 9 months after surgical curettage of lesion.

PP-64
Long term follow-up of central giant-cell granuloma of three patients treated with Intralesional injection of triamcinolone acetonide as an alternative treatment

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Objective: Central giant cell granuloma(CGCG) is a rare pathology, 7% of all benign lesions of the jaws, mostly seen at mandible. The lesion's location is usually at molar region with a growth pattern to midline. The resorption around the tooth roots and the decrease at the cortical bone with an expansion can be seen. Although surgical treatment is considered as the main treatment for this lesion, the use of intralesional steroid injections for treatment has recently been an alternative treatment method that reduces the size of lesion by new bone formation which avoid extensive bone resection.

Case: Radiolucent lesion were detected in lower posterior region, lower anterior region and upper posterior region in three patients with the complaints of enlargement and bleeding. After incisional biopsy were performed under local anesthesia, central giant cell granuloma was reported for all patients. The patients were treated with the protocol that was used to inject the mixture of 2 ml of triamcinolone acetonide and 2 ml of lidocaine hydrochloride and epinephrine solution. The patients have been followed for 2 years with control radiographs in every 3 months.

Conclusion: Although the main treatment for this lesion is surgical treatment, intralesional steroid injections for therapeutic purposes has recently become an alternative treatment method that can be used seperately or combination with surgical treatment, and presents low rates of complication. Intralesional steroid injection allows us to avoid extensive bone resection that can lead to functional and aesthetic defects.

Keywords: central giant cell lesion, corticosteroids, triamcinolone hexacetonide

PP-65
Morganella morganii isolated from Bisphosphonate-Related Osteonecrosis of the Mandible (BRONJ)

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[7]*Burak KİRİŞCİ*

Objective: Morganella morganii, whose natural environment is the human intestinal system, is a facultative anaerobic Gr(-) bacillus. It is opportunistic pathogen in the Enterobacteriaceae family, often isolated from hospital infections. A total of 136 cases of Morganella morganii have been reported to date, as usual, seen at septicemia. Urinary system infections, skin and soft tissue infections, and central nervous system infections due to Morganella morganii have been reported. This bacterium often results in a high mortality rate in patients with some infections. M. morganii possesses intrinsic resistance to antibiotics. Only 2 cases were seen in the head and neck in the literature; they were not observed in the intraoral region. This case report presents Morganella morganii isolated from bisphosphonate-related osteonecrosis of the mandible (BRONJ).

Case: A 79-year-old female patient was referred to our clinic with chronic obstructive pulmonary disease, asthma, hypertension, diabetes mellitus, and Behçet's disease. Due to osteoporosis, she took ibandronic acid orally for approximately 20 years. She had pain and pus in the left mandible. As a result of the clinical and radiological examination, stage 2 BRONJ was diagnosed. The sequester was observed in panoramic radiography. Morganella morganii was isolated from the operation site.

Conclusion: Any other case was not seen in the literature in which Morganella morganii was isolated from the intraoral mandibular region. M. morganii can cause severe infections of different tissue in patients of any age. Microbiological examination and treatment for the agent are critical in progressive and persistent infections of BRONJ for post-operative success.

Keywords: Morganella morganii, osteomyelitis, BRONJ

PP-66
Myofibroma In The Gingiva: A Case Report

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Objective: Myofibroma is a rare benign spindle cell neoplasm of the oral mucosa. It may present as a slow-growing, asymptomatic, rarely ulcerated firm submucosal swelling. The aim of the present study was to carry out a literature review and present a clinical case of a patient with a myofibroma in the gingiva and its management.

Case: An 8-year-old male patient applied to our clinic with the complaint of toothache. During the intraoral examination, it was observed that the 1.5 cm diameter, hard-consistent lesion was painless and prone to bleeding, which was learned to have been present and growing for 3 months, extending occlusally in the right maxillary premolar gingival region. An excisional biopsy was planned under local anesthesia. When the excised lesion was examined histopathologically, a diagnosis of myofibroma was made. There was no sign of recurrence during the postoperative follow-up period.

Conclusion: Misdiagnosis included benign and malignant spindle cell lesions of nerve tissue or smooth muscle origin, such as neurofibroma, leiomyoma and sarcomas. Thus, knowledge about myofibroma is important to establish the correct diagnosis and avoid morbidity of unnecessary aggressive treatment. The recommended treatment for myofibroma is total surgical excision in our patient. Treatments with radiotherapy, chemotherapy, and corticosteroids have also been reported, but their efficacy is uncertain.

Keywords: myofibroma, pathology

PP-67
Surgical and Prosthetic Rehabilitation of a Patient Injured in an Explosive Accident

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Objective: The high energy explosive accidents may cause comminuted fracture in the mandible. with soft tissue and bone loss, complicated treatment and increasd complication rate. The most important aim of the surgical procedure is to treat fracture fragments in the most appropriate way and to provide the occlusal relationship properly. Case: A 58-year-old male patient was treated in the intensive care unit due to trauma as a result of the explosion of a mine in Somalia in 2019, and was admitted to our clinic approximately 1 year after the accident. Untreated fractures in the symphysis and corpus regions of the right mandible were observed radiologically. The patient was treated by the fixation of the fragments with mini plates and reconstruction plates under general anesthesia. The block xenografts were applied between the fractured segments. after the 1 year follow up period vestibuloplasty and dental splint was performed due to insufficient amount of attached gingiva in the mandible. At the second operation free gingival graft was applied with vestibuloplasty for more attached gingiva. After healing prosthetic reconstruction was planned as 10 dental implant application. Conclusion: The comminuted fractures constitute 5-7% of mandible fractures and this rate rises to 50% in post-explosion fractures. In delayed cases where soft tissues can heal fibrotic between the fragments. Open reduction with load bearing systems are preferred in the treatment of comminuted fractures. Since the presence of fixation systems after open reduction creates a tendency for infection, providing soft tissue coverage has a great importance.

Keywords: communited mandible fractures, explosive accident

PP-68
Oral squamous papilloma: A case report

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Objective: Oral squamous papilloma (OSP) is a papillary or verrucous exophytic mass caused by the benign proliferation of stratified squamous epithelium caused by the human papillomavirus (HPV). OSPs are seen with equal frequencies in men and women. Although any surface of the oral cavity can be affected, the sites of predilection for localization of the lesions include the tongue, lip, and soft palate.

Case: A 47-year-old male patient was referred to our clinic by a periodontologist at an external center due to swelling in his palate that had not healed for several weeks. Excisional biopsy material was taken from the exophytic, pink-white-colored lesion that does not show any radiological findings and is clinically localized between the soft palate and hard palate. In the histopathological examination, the result of OSP was obtained. No recurrence was observed during the 9-month follow-up period.

Conclusion: For the early diagnosis of this type of oral pathology, regular dental check-ups should be made. Regular radiology and clinical follow-ups are preferred after the operation in terms of recurrence risk.

Keywords: excisional biopsy, human papillomavirus, oral squamous papilloma

PP-69
Evaluation of the differential diagnosis of multiple myeloma and lymphoma in jaws: two case report

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Objective: Multiple myeloma is a malignant neoplasm that develops with monoclonal proliferation of plasma cells. It accounts for approximately 1% of all malignancies and 15% of all hematological malignancies. Lymphomas are the most common type of cancer in the oral cavity after squamous cell carcinoma and salivary gland tumors. Diffuse B-cell non-Hodgkin lymphoma, characterized by proliferation and precursor of lymphoid cells.

Case: A 46 year old female patient was admitted to our clinic with pain at mandible. After radiological examination of the patient, localized radiolucent areas were detected in both mandibular premolar regions and the right ramus. Relevant lesions were unilocular and relatively well-circumscribed. Incisional biopsy was performed on the lesion in the left mandibular premolar region. After pathological examination, the lesion was diagnosed as multiple myeloma. In other 47-year-old patient, localized nonexpansive radiolucency was observed at anterior region of the mandible. In the computed tomography, lytic areas at the alveolar crest and resorption around the teeth were observed. Excisional biopsy was performed. Microscopic findings were interpreted as diffuse B-cell lymphoma.

Conclusion: B-cell lymphoma and multiple myeloma are pathologies that can originate from B lymphocytes. At the same time, both pathologies have similar clinical and radiographic findings so differential diagnosis becomes difficult. Therefore, performing a bone marrow biopsy in the differential diagnosis of multiple myeloma makes it easier to reach a definitive diagnosis.

Keywords: B-Cell Lymphoma, Multiple Myeloma

PP-70
Reconstruction of Post-Traumatic Maxillary Deformity: A Case Report

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Objective: The post-traumatic malocclusion may occur as a result of delay in the treatment when the patient's condition does not allow immediate or early reduction,or unsuitable surgical management without consideration of the occlusion. Unsatisfactory outcome may result with segmental loss of maxilla-mandibula or maxillo-mandibular inbalance. In this case report, a two-piece segmental Le Fort I osteotomy and autogenous cortico-cancellous iliac grafting for the management of maxillary dentoalveolar reconstruction is presented.

Case: A 21 years old male patient who was initially treated at another institution for midfacial trauma due to work accident, referred to our clinic with severe maxillary constriction because of old malunited jaw fracture and alveolar bone loss. After the orthodontic treatment the patient underwent two-piece segmental Le Fort I osteotomy to restore the malunion and expand the maxilla. Maxillary dentoalveolar defect was then reconstructed using interpositional bone grafting technique with an autogenous cortico-cancellous iliac block graft five months later. Dental implants were placed in the anterior maxillary region six months later and fixed prosthetic rehabilitation completed four months later.

Conclusion: The initial surgical procedure in maxillofacial fractures should be performed with considering the optimal fixation of segments and occlusion. However, when establish of occlusion is inaccurate or patient's condition may not allow to consider occlusion, revision surgery becomes necessary. Therefore, surgeons should keep in mind this possibility to achieve ultimate clinical outcome.

Keywords: iliac bone, Le Fort I, reconstruction

PP-71
Two Staged Preprosthetic Rehabilitation of a Patient with Maxillary Anterior Bone Deficiency: Report of a Case

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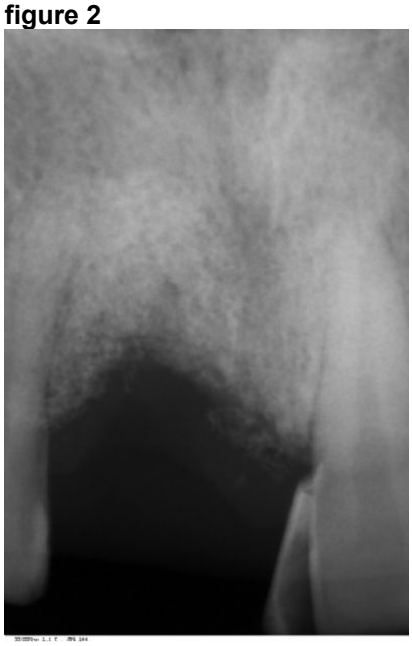
Objective: Bony reconstruction and dental rehabilitation of patients with anterior maxillary alveolar defects is a very complicated procedure. Various methods and materials for increasing the physiological thickness of hard and soft tissues have been described including connective tissue graft (CTG) and xenograft with titanium membrane. The aim of this study is to present pre-prosthetic and implant rehabilitation of a patient with maxillary incisor bone defect.

Case: A 45 year-old female patient referred to our department for implant supported prosthetic rehabilitation. Clinical examination revealed severe bone and soft tissue atrophy in the maxillary anterior region. Two step treatment approach was planned: 1. Bone augmentation with xenograft and titanium mesh 2. Implant placement and connective tissue grafting 6 months after the initial operation. Under local anesthesia bone defect was filled with 2cc xenograft. The grafted area was closed with a titanium mesh. The wound was closed using PTFe sutures. A dental implant (4.2mm-14mm) was placed to the grafted region and connective tissue graft operation was performed simultaneously. The healing is achieved uneventfully and prosthetic restoration was made 3 months after the second operation.

Conclusion: Detailed pre operative clinical examination of the implant region is very important for the functional and esthetic success of the implant therapy. The deficient region should be restored before implant placement for proper esthetic results especially in anterior regions. A two stage surgery with bone grafting with titanium mesh and connective tissue transfer with implant placement could be preferred as a treatment option.

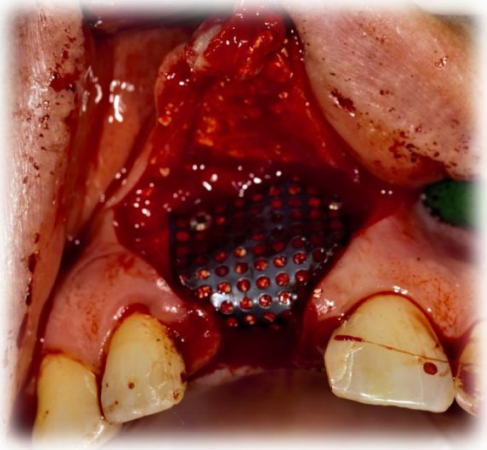
Keywords: bone augmentation, connective tissue graft, titanium mesh

figure 2



Preoperative periapical radiographic view of the region

figure 3



Xenografts and a titanium mesh were placed on the defect area

figure 4

Postoperative first month

figure 5

Connective tissue grafting

figure 6

postoperative 2.years

figure 1

Preoperative intraoral photograph showing maxillary incisor with temporary prosthetic restorations

PP-72
Peripheral Ossifying Fibrom Of Mandibula: A Case Report

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Objective: Peripheral Ossifying Fibromas (POF)are benign asymptomatic neoplasms of the mandible that generally have slow growth and present proliferation of fibrous cell tissue, with a varying quantity of bone products that include bone, cement or a combination of these. POFs are common in the mandibular region and in the second decade of life usually. The aim of this study is to present the diagnosis and surgical treatment of a case of ossifying fibrom.

Case: A 42 years old female patient referred to our clinic with a complain of tooth ache like pain swelling on the right posterior mandibular region. Her past medical and family history was non-contributory. Clinical examination revealed a solitary, pedunculated mass on the right mandibular posterior mucosa. The lesion was pink in color with a smooth surface, measuring approximately 1.5x2cm. No surface ulceration was noted. Panaromic radiograph showed no significant bony changes. Provisional diagnosis of POF and piogenic granuloma was considered. complete surgical excision of the lesion was performed under local anesthesia.Pathology result was compatible with benign peripheral ossifying fibrom. The patient controls continue and we have no reccurence yet.

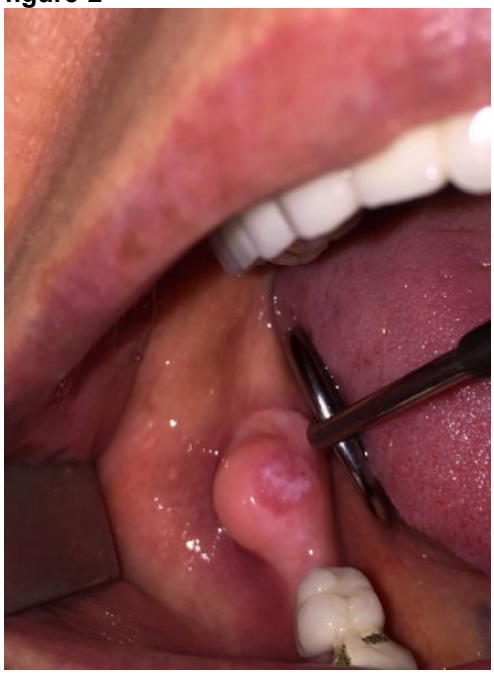
Conclusion: POFs are benign lesions with a common clinical presentation but distinct histopathological picture. Irrespective of the type of mineralized component, the treatment of choice is surgical excision and there are very few cases of recurrence reported.

Keywords: fibroma, Ossifying, Peripheral

figure-1

preoperative orthopantomography of patient.

figure-2



pre-operative intra-oral view of patient.

figure 3

intra-operative intra-oral view.

figure-4

Post-operative view of patient

figure-5

pieces of lesion.

PP-73
Management of Odontogenic Cyst Cavity Using Injectable Platelet-Rich Fibrin Impregnated in CollagenSponge

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Objective: Odontogenic cysts are pathologic structures surrounded by epithelium and fibrous connective tissue. These jaw cysts cause severe bone destruction and tooth loss. In this case series, we aimed to evaluate the success and the bone repair with the use of injectable-platelet rich fibrin (i-PRF) impregnated in collagen sponge after enucleation of maxillary odontogenic cysts.

Case: Three systemically healthy patients with llytic lesion in the upper jaw were treated in Ege University, School of Dentistry, Department of Oral and Maxillofacial Surgery. Biopsy was taken before the operation to confirm diagnosis. Treatment was performed as follows: enucleation of cyst epithelium, curettage and place to i-PRF impregnated in collagen sponge. i-PRF was obtained with a standard centrifuge procedure, 700 rpm in 3 minutes. At 6-month follow-up, no adverse effect was reported. Radiographic examination revealed bone repair and there was no infective or connective tissue at the time of implant surgery.

Conclusion: It was seen that the use of i-PRF impregnated in collagen sponge could be efficient bone repair in the cyst cavities. Longer follow-up and histological evaluation are needed to obtain more accurate information.

Keywords: collagen sponge, injectable Platelet Reach Fibrin, Odontogenic Cysts

PP-74
MRONJ: Case Report

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Introduction: Bisphosphonate-induced osteonecrosis of the jaws (BRONJ) disease was first discussed in the case series published by Robert Marx in 2003. In the latest status report of the American Association of Oral and Maxillofacial Surgeons (AAOMS) in 2014, giving an opinion on BRONJ; It was found appropriate to change the name of the disease, which was named as "bisphosphonate-induced osteonecrosis of the jaws (BRONJ)", to "drug-induced osteonecrosis of the jaws (MRONJ)" after being seen after antiresorptive and antiangiogenic treatments. Although tooth extraction is one of the leading local factors for the development of MRONJ in patients treated with antiresorptive or antiangiogenic drugs, it is stated that pre-existing dental or periodontal infection may be a more important risk factor for the development of MRONJ.

Case: The patient is a 66-year-old man receiving chemotherapy for prostate cancer. In another center, teeth were extracted from the right upper jaw. After extraction, the patient developed osteonecrosis. The patient was consulted to our clinic by an oncologist on December 1, 2021. The patient's osteonecrosis area was irrigated for 2 months and combined antibiotic therapy was given to the patient. The sequestration area was cleared under general anesthesia. Since the maxillary sinus was affected, the cheek was covered with fat tissue to heal the area. In the postoperative period, the area was completely closed and epithelialization was observed.

Conclusion: Early diagnosis is important in terms of improving the quality of life of patients and treating the disease before it progresses.

Keywords: Mronj, buccal fat, cancer

PP-75
Compound Odontoma of Maxillary Sinus: A Case Report

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Objective: Odontomas are the most common formations among odontogenic tumors containing dental structures such as enamel, dentin, and pulp. Two types of odontoma have been defined by the WHO. According to this definition, those with miniature teeth are called compound odontomas, and those with amorphous shapes are called complex odontomas. Odontomas occur equally in male and female. They develop most often in the 2nd-3rd decade of age and without symptoms. In this case report, a compound odontoma extracted from the right maxillary sinus of a 67-year-old male patient is presented.

Case: A 67-year-old male patient was referred to our clinic because of the pathological formation in his right maxillary sinus. Structures with dental opacity were observed in the CBCT images taken from the patient. The right maxillary sinus region of the patient was opened, and the lesion was cleaned with the contents of the infected sinus. In the examined sections, dental tissue containing various components in an irregular structure was observed. A diagnosis of compound odontoma was made.

Conclusion: Odontomas do not cause symptoms unless they are infected. Although it is usually seen in the jaw bones, it can develop in the maxillary sinus and cause sinusitis, although it is rare.

Keywords: compound odontoma, maxillary sinus

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PP-76
Evaluation of the Therapeutic Effects of the Topical and Systemic Forms of Honokiol in 5-Fluorouracil-induced Oral Mucositis Model in Rats

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Objective: The aim of this study was to evaluate the effects of honokiol on 5-florourasil (5-FU) induced oral mucositis (OM) in rats.

Materials - Methods: A total of 24 female Wistar Albino rats were injected with 5FU on day 1, 3 and 5. A superficial scratch was linearly created in the area of 1 cm2 with 21-gauge needles on the right buccal mucosa on days 3 and 5. The animals were randomly divided into 4 groups: control, vehicle, topical honokiol and systemic honokiol groups. All animals were sacrificed on the day 10 after the first 5-FU application. Blood and buccal tissue sampling were analysed for serum total antioxidant status (TAS) levels, serum total oxidant status (TOS) levels, and oxidative stress index (OSI) plus histopathological evaluations.

Results: When the systemic and topical honokiol group and vehicle group compared to control group, no statistically significant difference was found histopathological scores. (p=1.000, p=0.264, p=1.000, respectively). There were no significance differences in histopathological scores between systemic honokiol and topical honokiol groups (p=1.000), or between systemic honokiol and vehicle groups (p=0.139). A statistically significant difference was observed in the histopathologic analysis between the topical honokiol and vehicle groups, (p=0.006). There were no differences in TAS and TOS concentrations between the groups.

Conclusion: The authors found no beneficial effect of systemic or topical honokiol on healing 5FUinduced OM. To confirm its effects on OM, further studies are required with different study designs.

Keywords: Antioxidant, oral mucositis, honokiol

MRONJ Turkey Status Assessment Survey: Preliminary Report

by MRONJ Study Group of AÇBİD

Our aim in this study to determine the expectations of clinicians working in the field of Oral, Dental and Maxillofacial Surgery and the problems they encounter in the clinic about MRONJ.

To assess the status, we conducted an online survey on faculty members in Oral and Maxillofacial Surgery Departments. The ethical approval was obtained from Okan University. The survey included the data of 187 faculty member clinicians enrolled to the study (%56,7 male) and these results were given here as preliminary findings of the survey. Mean experience on the field of OMFS was 6,13±6.04 years. 36,4% of participants has identified MRONJ as their area of special interest. The organization that they followed about MRONJ were asked and 57% were not following any associations, 30% were following American Association of Oral and Maxillofacial Surgery, where our association were followed by 3% of the participants. Clinicians reported that patients were mostly cancer patients 66,5% and the drug responsible for MRONJ was zolenrdonic acid (n=113)>alendronic acid (n=13)>denosumab (n=12), respectively. The prefered screening method was CBCT by the 92,5% of the clinicians participated the study. Consultation of the patient prior to surgery answered as always by 78,6% of the participants and also these consultations were found to be insufficient by 60,4%.

These preliminary findings encourges our MRONJ study group of AÇBİD building bridges and providing support for the correct and adequate transfer of information with physicians and also to be an accurate and reliable source of information among our colleagues. Further studies are planned to achieve our goals.

Keywords: MRONJ, Survey, Oral and Maxillofacial Surgeons