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Wednesday,	April 24 th , 2019 Registration Courses Poster Presentation Exhibition Symposias Oral Abstract Masterclass Social Events, Breaks				
08:00-18:30	Registration				
13:30-15:05	AÇBİD – NextGen 1 Hall A				
	Chairperson: Alper Alkan				
13:30-13:50	Main Speaker: Alper Alkan (Turkey)				
	Maintaining the Profession of OMFS in Turkey				
	Use of Botulinum Toxin in Oral and Maxillofacial Surgery - Tuba Develi (Turkey)				
14:05-14:20	Ozone and Low Level Laser Therapy Applications on Peripheral Nerve Regeneration				
14.00 14.05	Türker Yücesoy (Turkey)				
14:20-14:35	Clinical and Virtual Facial Treatment Planning in Orthognathic Surgery Abdullah Özel (Turkey)				
14:35-14:50	The Effect of Preoperative, Perioperative and Postoperative Factors on the Facial				
11.00 11.00	Soft Tissue After Orthognathic Surgery - <i>Tayfun Yazıcı (Turkey)</i>				
14:50-15:05	Non-Invasive Surgical Trigeminal Nerve Repair: Harvesting and Grafting				
	Nima Moharramnejad (Turkey)				
15:05-15:30	Coffee Break				
15:30-17:00	AÇBİD – NextGen 2 Hall A				
	Chairperson: Alper Alkan				
15:30-15:45	Gait Analysis of Patients Subjected to the Atrophic Mandible Augmentation with				
	Iliac Bone Graft - Erol Cansız (Turkey)				
15:45-16:00	Photo-Biomodulation Therapy in Peripheral Nerve Regeneration				
16.00-16.15	Poyzan Bozkurt (Turkey) The Dynamic Navigation in Implant Dentistry - Hasan Onur Şimşek (Turkey)				
	The "All-on-Four" Implant Therapy Protocol in the Management of Edentulous Patients				
	Cem Üngör (Turkey)				
16:30-16:45	Ultrasonic Bone Osteotomy in Orthognathic Surgery - Ahmet Emin Demirbaş (Turkey)				
16:45-17:00	Modification Techniques of Dental Implant Surfaces - Emre Yurttutan (Turkey)				
17:00-17:30	Coffee Break				
17:30-18:30	CORPORATE SESSION 1 - KEYSTONE Hall A				
	Success of Alveolar Bone Augmentation Techniques - Sıdıka Sinem Akdeniz (Turkey)				
17:30-18:30	MEETING WITH THE SPONSORS				
19:30-20:30	Opening and Award Ceremony				
20:30	Dinner				





Registration	Courses	Presentation Exhibition Symposias Oral Abstract Masterclass Social Events, Breaks Thursday, April 25", 2019
08:00- 1	18:00	Registration
08:00- 1	17:00	Poster Presentations
08:00-1	17:00	Exhibition
08:00-0	09:00	Oral Abstract Session 1 Hall A
		Chairperson: Nihat Akbulut
0	P-001	The Effect of Different Biomaterials on the Stability of Implants Placed Immediately
0	P-002	<u>Gökhan Gürses</u> , Alparslan Esen Effects of Injectable Platelet Rich Fibrin(I-PRF) on Implant Stability: A Preliminary Study <u>Serhat Güvenc</u> , Mustafa Cenk Durmuşlar
0	P-003	Symphysis Graft In Dental Implant Surgery: Report Of Three Cases Serkan Yıldız, Mehmet Kemal Tümer, Aras Erdil, Mustafa Sami Demirsoy
0	P-004	The clinical success of implants placed in mandible after delayed alveolar ridge split with a modified corticotomy technique <u>Gürkan Abdioğlu,</u> Zeynep Gümüşer, Necip Fazıl Erdem
0	P-005	A Conservative Approach for Closure of Medication-Related Osteonecrosis Defects in Maxilla <u>Birkan Tatar, Onur Şahin</u>
0	P-006	Evaluation of the Effect of Manual Lymphatic Drainage Therapy on the Edema, Pain and Trismus After Bilateral Mandibular Third Molar Surgery
0	P-007	<u>Nuri Ünal.</u> Yasemin Kayalı, Birkan Tatar, Murat Ulu Long-Term Success of Single-Molar Implant Restorations Mehmet Melih Omezli, Ferhat Ayranci <u>, Mustafa Ay</u>
08:00-0	09:00	Oral Abstract Session 2 Hall B
		Chairperson: Fatih Mehmet Coşkunses
0	P-008	Primary/secondary stability of implants as a predictive factor of bone-implant contact: an animal Micro-CT study Mustafa Ozcan, Cenk Mehmet Haytac
0	P-009	Evaluation of the Effect of Injectable Platelet-Rich Fibrin Applied to Bone Graft on New Bone Formation and Graft Resorption by Immunohistochemistry and Histomorphometry <u>Keremcan Kuru</u> , Hüseyin Akçay, Fatma Şimşek
0	P-010	Investigation of The Effect of Resorption Patterns in Different Bone Types on Stresses Around The Implant With Finite Element Analysis Levent Acar, Bora Özden
0	P-011	The effect of screw tent pole technique on posterior atrophic mandible: a split-mouth study <u>Gözde Işık,</u> Tayfun Günbay, Murat Sezak
0	P-012	Rehabilitating Wide Maxillary Defect With Distraction Osteogenesis And Khoury Technique Yavuz Fındık, Timuçin Baykul, Gülperi Koçer, Mehmet Fatih Şentürk, Tayfun Yazıcı <u>, Halime Karakurt</u>
0	P-013	Recostructing Palatale After Huge Pleomorfic Adenoma Excision: Buccinator Musculomucosal Flap Sadi Memis, Koray Onur Şanal, Merve Bozkurt, Selma Erdoğan Düzcü
0	P-085	The Effect of Missing Teeth or Existing Prostheses on Orthodontic Treatment Duration of Skeletal Class III Orthognathic Surgery Patients Banu Kilic





	Oril 25 th , 2019 Registration Courses Poster Presentation Exhibition Symposias Oral Abstract Masterclass Social Events, Breaks Oral Abstract Session 3				
0.00 00.00	Chairpersons: Ülkem Cilasun				
OP-015	Bruxism: Does it Affect the Mandibular Trabecular Bone Structure?				
OP-016	<u>Melike Gulec.</u> Melek Tassoker, Sevgi Ozcan The Relationship Between Dentistry and Forensic Medicine				
OP-017	<u>Ahmet Altan</u> , Selçuk Çetin, Halenur Altan, Nihat Akbulut Management of Central Giant Cell Granuloma with Denosumab and Calcitonin: Two Case Reports and Review of Current				
01 017	Treatments				
OP-018	Ahmet Emin Demirbaş <u>, Gürkan Ağyüz,</u> Firas Mohsen, Mustafa Karakaya, Fatma Doğruel, Alper Alkan Sialolithiasis: Case Series				
OP-019	Bahadır Sancar, Hilal Alan, Ramazan Serdar Esmer, <u>Burak Ünlütürk</u> Patients' Awareness and Knowledge About Oral & Maxillofacial Surgery				
OP-020	Begüm Elbir, İpek Necla Güldiken, Çağrı Delilbaşı, Gökhan Gürler				
0P-020	The Assessment of The Position of The Mandibular Canal and Mandibular Third Molar on Cone-Beam Computed Tomography Images				
OP-021	Dilek Menziletoğlu, <u>Tolgahan Çayır</u> Soft and Hard Tissue Changes in the Oral and Maxillofacial Region in Patients with Neurofibromatosis: A Rare Case Report				
	Gunay Yapici Yavuz, Mahmut Koparal, Aydin Keskinruzgar, <u>Seyma Bayazit</u>				
08:00-09:00	Oral Abstract Session 4 Hall D				
	Chairpersons: Özkan Özgül				
OP-022	Treatment of A Patient with Amelogenesis Imperfecta with Surgery First Method Emire Aybüke Erdur, Kuter Karakaşlı, Alparslan Esen				
OP-023	A Triad of Temporomandibular Joint Ankylosis, Mandibular Retrognathia and Severe Obstructive Sleep Apnoea				
	<u>Issa Khalfan Alnaamani.</u> Abdullaziz Bakathir, Ahmed Alhashmi, Mohammed Alabri, Hussain Alkindi, Intisar Almaki, Zainab Albulushi				
OP-024	Evaluation of The Effect of Mandibular Length and Height on The Sagittal Split Ramus Osteotomy Rigid Internal Fixation Techniques: A Finite Element Analysis				
	Ezgi Ergezen Ozasır, Emre Tosun, Hakan Hıfzı Tüz				
OP-025	Multidisciplinary Treatment of Oligodontics and Lateral Openbite Case Melis Haydarpasa, Doğan Dolanmaz, Türker Yücesoy, Abdurrahman Balaban, Elif Dilara Şeker, Abdurrahman Şahinbaş				
OP-026	A new anchorage technique in rigid external maxillary distraction <u>Tayfun Civak, Burak Ergüder, Haluk Işeri, Selçuk Basa</u>				
OP-027	Orthognathic Surgery From Patient's Perspective				
OP-028	<u>Deniz Akın</u> , Fatih Mehmet Coşkunses, Hatice Hoşgör Evaluate The Morphological Changes on Nasopalatine Structure with Cone Beam Computed Tomography After Sarme				
	Procedure <u>Neset Akay,</u> Umut Tekin, Fethi Atil, Ercüment Önder, Zahid Adışen				
0.00 00.20					
	Coffee Break				
9:30-10:30					
	Chairpersons: Reha Kişnişci, Julio Acero, Aakshay Gulati				
9:30-10:00	Tissue Engineering & Nanotechnology in OMFS - Kaveh Shakib (UK)				
0:00-10:30	Technological Breakthroughs in CMF and OMF: Evolution & Trends - Manlio Galie (Italy)				
0:30-11:00	Coffee Break				





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Registration	Courses	Presentation Exhibition Symposias Oral Abstract Masterclass Breaks Thursday, April 25", 2019					
11:00-1	12:30	MAJOR SYMPOSIUM 2 Hall A					
		Chairpersons: Manlio Galie, Velupillai Ilankovan, Zafer Özgür Pektaş					
11:00-1	1:30	Experimental Model of Mandibular Distraction Osteogenesis: Pros and Cons					
		Ercüment Önder (Turkey)					
11:30-1	2:00						
		Bones and Treatment Planning - Vitomir Konstantinovic (Serbia)					
12:00-1	2:30	Microvascular Reconstruction - Aakshay Gulati (UK)					
12:30-1	3:30	Lunch					
12:30-1	3:30	MASTERCLASS 1 Hall A					
		Arthroscopy of the TMJ. How to Start and Improve Our Practice?					
		Rafael Martin Granizo (Spain)					
12:30-1	3:30	MASTERCLASS 2 Hall B					
		Arthroplasty for Internal Derangements					
		Reha Ş. Kişnişci (Turkey)					
13:30-1	5:00	MAJOR SYMPOSIUM 3 Hall A					
		Chairpersons: Vitomir Konstantinovic, Belgin Gülsüm, Altan Varol					
13:30-1	4:00	An Update in Arthocentesis and Infiltrations in the TMJ					
		María Lourdes Maniegas Lozano (Spain)					
14:00-1	4:30	Management of Temporomandibular Joint Ankylosis in the Pediatric Patient					
		Sevil Kahraman (Turkey)					
14:30-1	5:00	Arthroscopy of the TMJ: Past, Present and Future - Rafael Martin Granizo (Spain)					
15:00-1	5:30	Coffee Break					
15:00-1	6:30	COURSE Hall A					
		Principles in Planning of Orthognathic Surgery					
		Doğan Dolanmaz (Turkey), Gökmen Kurt (Turkey)					
16:30-1	17:30						
		Contemporary Overview of Blood Concentrates. What? Where? When?					
		Onur Gönül (Turkey)					
19:00		Dinner					





Friday, April	26 th , 2019	Registration	Courses	Poster Presentation	Exhibition	Symposias	Oral Abstract	Masterclass	Social Events, Breaks
08:00-17:00	Poster Presentations								
08:00-17:00	08:00-17:00 Exhibition								
08:00-09:00	08:00-09:00 EACMFS – Award Session Ha						Hall A		
	Chairpersons: Umut Tekin, Figen Çizmeci Şenel								
OP-029	Is the current staging system of medication related osteonecrosis of the jaw (MRONJ) is appropriate for diagnosis and clinical follow-up? An offer for new MRONJ staging system: A retrospective single center cohort study <u>Sevdanur Urhan</u> , Osman Taha Köseoğlu, Selen Adiloğlu, Nursel Akkaya								
OP-030	OP-030 Effect of systemic oxytocin application on new bone formation and distraction rate on rabbit mandible: first results								
OP-031	<u>Berkan Altay</u> , Kaan Orhan, Mustafa Ercüment Önder, Umut Tekin, Fethi Atıl, Ismail Doruk Koçyiğit, Özkan Özgül Investigation of the Effect of Low Level Laser Therapy on Implant Osseointegration in Implant-Supported Mandibular Overdenture Cases Suheyb Bilge, <u>Seyma Bayındır,</u> Ahmet Emin Demirbaş				ılar				
OP-032	Evaluation of Perioperative Medical	Intervention	n Related t						
OP-033	<u>Pelin Aydın,</u> Sıdıka Sinem Akdeniz, Burak Bayram, Deniz Kaya, Deniz Sivrioğlu, Coşkun Araz Comparing the Ideal and Real Beauty Arch after Le Fort I osteotomy without malar augmentation								
OP-034	<u>Reyhan Saglam,</u> Abdullah Ozel, Zeg Preemptive Analgesic Effect of Intra					rd Molar S	uraerv: A Pi	rospective.	
	Preemptive Analgesic Effect of Intravenous and Oral Ibuprofen in Mandibular Third Molar Surgery: A Prospective, Randomized, Double-Blind Clinical Trial Ahmet Emin Demirbaş, Suheyb Bilge, Mustafa Karakaya, Dilek Günay Canpolat, Nükhet Kütük, <u>Selin Çelebi</u> , Alper Alkan								
			παιακαγα,	Dilek Gullay	, Oaripolai,	NUMIELINU	nuk, <u>Oenn ç</u>	<u>261601,</u> Alpe	
08:00-09:00)							Hall B
00.005	Chairperson: Firat Selvi				D 11 .				
OP-035	Management of Odontogenic Fibron Timuçin Baykul, Gülperi Koçer, Yavı						n 3D: A clin	lical case re	eport
OP-036	Evalution of the Effect of Surgical Re Murat Kava. Mehmet Fatih Şentürk,	apid Maxilla	ary Expansi	on on TMJ I	Disc Positio	on with Mag		nance Ima	ging
OP-037	CBCT Evaluation of the Relation of	TMJ Morph	ology and					rangement	1
OP-038	<u>Seyhan Karaaslan,</u> Hakan Hıfzı Tüz Clinical Outcomes of Auriculotempo	ral Nerve B	lock in TM		n				
OP-039	<u>Mustafa Sami Demirsoy</u> , Mehmet K Evaluating the Changes of Tempor				therany in	an Experin	nental Anim	al Model	
	Fatih Taskesen, Figen Çizmeci Şen	el, Cem Un	gor, Nuray	Yılmaz Altır	ntaş, Musta	fa Cihat Av	unduk, Had	cı Hasan Es	sen
OP-040	Intra-oral open reduction of the med Ahmed AI Hashmi	ically disloc	ated peadi	atric condyla	ar head fra	ctures. Rep	ort of 2 cas	ses	
OP-041	Intraoral reduction of prolonged mar <u>Ahmed Al Hashmi,</u> Noor Al Saadi	ndibular disl	ocation thr	ough corono	oidectomy/o	coronoidoto	omy		





Registration Courses	s Poster Presentation Exhibition Symposias Oral Abstract Masterclass Social Events, Breaks Friday, Apri	l 26 th , 2019
08:00-09:00	Oral Abstract Session 6	Hall C
	Chairperson: Kıvanç Bektaş Kayhan	
OP-042	Tenosynovial Giant Cell Tumor of Infratemporal Fossa excised through combined Trans mandibular and endo approach	oscopi
	Abdullah Mohammed Albakri, Abdullaziz Bakathi, Ahmed Alhashmi, Noor Alsaadi, Salma Alshibani, Faisal Al	kalbani
OP-043	Noonan Syndrome and 3 Years Follow-Up <u>Ayse Ece Ünsalan,</u> Türker Yücesoy, Banu Kılıç, Erdem Kılıç	
OP-044	The Evaluation of Serum C-Terminal Telopeptide Value for The Risk of Medication Related Osteonecrosis of	The Jaws
	Erdem Kılıç, Fatma Doğruel, Canay Yılmaz Asan, <u>Taha Pergel,</u> Emine Fulya Akkoyun, Fahri Bayram	
OP-045	Conservative treatment of an ameloblastoma by marsupialization with a favourable response: A case report Esin Demir Ersecgin	
OP-046	Pathologic Fracture of the Mandible in a Multiple Myeloma Patient	
OP-047	Osman Akıncı, Poyzan Bozkurt, Ramazan Arslan, Emrah Mansuroğlu, Çağıl Vural, Onur Özgüral, Reha Şükr Hemimandibulectomy Due To Huge Odontogenic Myxoma By Preserving Inferior Alveolar Nerve: A Case Rep	
	Timuçin Baykul, Yavuz Fındık, Gülperi Koçer, Mehmet Fatih Şentürk, Tayfun Yazıcı, <u>Şeyma Ataş</u>	
OP-048	Conservative Treatment of Large Volume Odontogenic Cysts with Decompression: Case Series Burakhan Hakan Tanışık, Hilal Alan, Ramazan Serdar Esmer, Ümit Yolcu, Mahmut Koparal	
08:00-09:00		Hall D
	Chairperson: Alparslan Esen	
OP-049	Low Grade Mucoepidermoid Carcinoma and Glandular Odontojenic Cyst: Comparison of Two Cases Kubra Karakuzu, Nazife Begum Karan	
OP-050	The Effect of Modified High Lefort 1 Osteotomy in Mid-Face Deficiency	
OP-051	<u>Nazife Begüm Karan,</u> Çiğdem Köşe Evaluation of Posterior Airway Space after Setback Surgery by Simulation	
01-031	<u>Nazife Begüm Karan,</u> Sevil Kahraman	
OP-053	Bad Split During Bilateral Sagittal Split Osteotomy of Mandible: Case Report Series	
OP-054	Timuçin Baykul, Yavuz Fındık, Gülperi Koçer, Mehmet Fatih Şentürk, Tayfun Yazıcı, <u>Seçil Duygu Sümengen</u> The Effect of Low Level Laser Therapy on Paresthesia Recovery After Implant Surgery	
00.055	Palin Çiftçioğlu, Esra Beyler, Nur Altıparmak, Sıdıka Sinem Akdeniz	
OP-055	Do implants closed with healing cap show less marginal bone loss after 1 year? <u>Esra Beyler</u> , Nur Altıparmak, Sıdıka Sinem Akdeniz	
09:00-09:30		
09:30-10:30		Hall A
	Chairpersons: Nicholas Kalavrezos, Bora Özden	
09:30-10:00	Concurrent Correction of Nasal Deformities and Jaw Deformities	
	Tian Ee Seah (Singapore)	
10:00-10:30	How to Manage Sleep Apnea Syndrome for an Oral & Maxillofacial Surgeon	
	María Lourdes Maniegas Lozano (Spain)	
10:30-11:00	Coffee Break	





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Registration Courses	Presentation Exhibition Symposias Oral Abstract Masterclass Social Events, Breaks Saturday, April 27 th , 2019						
08:00-17:00	Poster Presentations						
08:00-17:00	Exhibition						
08:00-09:00	Oral Abstract Session 8 Hall A						
	Chairperson: <i>Gülperi Koçer</i>						
OP-056	Evaluation of The Effect of Different Types of Osteotomies on The Primary Stability of The Implant in Closed-Type Sinus Lifting Technique Ugur Mercan						
OP-057	Open Barrier Membrane Technique with Expanded Polytetrafluoroethylene in Bone Augmentation Levent Ciğerim, Abdulrahman Alghalaeini						
OP-058	An Evaluation of the Correlation between the Eruption Angle of Mandibular Third Molars and the Occurrence of Periodontal Bone Loss in Second Molars <u>Muhammet Fatih Çiçek, Cansu Gül Koca, Hamdi Sarı</u>						
OP-059	<u>Munammet Fatin Çiçek,</u> Cansu Gul Koca, Hamdi Sari Evaluation of the effectiveness of the mineralized plasmatic matrix and tricalcium phosphate graft application after mandibular impacted third molar surgery in terms of periodontal and osseous healing distal to the second molar Ali Kılınç, Bozkurt Kubilay Işık						
OP-060	Pre-operative and Post-operative 3-Dimensional CBCT Evaluation of Anterior Alveolar Bone for Immediate Implantation						
OP-061	Murat Akkoyunlu, Çağrı Delilbaşı A Cross-Sectional Questionnaire Study on Antibiotic Prescribing Habits of Clinicians in Association With Routine Dental						
OP-062	Implant Surgery Gül Merve Yalçın Ülker, <u>Merve Çakır.</u> D. Gökçe Meral Retrospective Analysis of 107 Zygomatic Implants for Maxillary Prosthetic Rehabilititation <u>Mert Akbaş.</u> Barış Altuğ Aydil, Altan Varol, Gülhan Dergin, Hasan Garip, Mustafa Yalçın,						
08:00-09:00	Oral Abstract Session 9 Hall B						
	Chairperson: Özgür Erdoğan						
OP-064	Bilateral elongation of coronoid process: an extraordinary case of extraarticular ankylosis Serhat Can, Altan Varol						
OP-065	Influence of Hyoid Bone Position on Maximum Mouth Opening: 3D Inverse Dynamic Jaw Model Analysis <u>Ciğdem Karaca.</u> Hakan H Tüz, Can Özcan						
OP-066	A novel approach for tinnitus:Botulinum toxin A injection <u>Mustafa Zengin.</u> Tuba Develi, Yıldırım Ahmet Bayazıt, Sina Uçkan Temporomandibular Joint Prosthesis Using for the Reconstruction of Four Different Conditions						
OP-067							
OP-068	<u>Seçil Çubuk</u> , Nur Altıparmak, Sıdıka Akdeniz, Burak Bayram Evaluation of Oxidative Stress and Inflammation Markers in Serum and Saliva of The Patients With Temporomandibular Disorders <u>Dilara Kazan</u> , Burcu Baş, Abdurrahman Aksoy, Enes Atmaca						
OP-069	Dilara Kazan, Burcu Baş, Addurranman Aksoy, Enes Atmaca Evaluation of The Gap Volume Following Temporomandibular Joint Ankylosis Surgery: A Preliminary Study Canseda Avağ, Hakan Hıfzı Tüz, Emre Tosun						
OP-063	Peadiatric TMJ ankylosis:Three scenarios and Three approaches Ahmed Al Hashmi, <u>Abdulaziz Bakathir</u>						



	Oral Abstract Session 10 Hall C					
	Chairperson: Sıdıka Sinem Akdeniz					
OP-071	Outcome of Mandibular Distraction Osteogenesis in Omani Paediatric Patients with Severe Upper Airway Obstruction					
OP-072	<u>Abdulaziz Bakathir</u> , Said Al Rashd, Mohammed Al Nabhani Stability of Sagittal Split Osteotomy Fixation System Using Different Screw Dimensions in Correlation to Cortical Bone					
0. 0.1	Thickness. A Finite Element Study					
OP-073	Humam Alghamian, Selim Hartomacioğlu, Sina Uçkan Sagittal Split Ramus Osteotomy in the Absence of Cancellous Bone Along the Ascending Ramus					
	Hüseyin Akçay, <u>Birkan Tatar,</u> Fahrettin Kalabalık, Murat Ulu					
OP-074	Mandible-first sequence treatment in bimaxillary orthognathic surgery using 3D printed surgical templates for facial asymmetry					
OP-075	Yavuz Findik, Timuçin Baykul, Gülperi Koçer, Mehmet Fatih Şentürk, Tayfun Yazıcı, <u>Cihan Varol,</u> Mustafa Yasin Yeter Modified Le Fort I Osteotomy and Genioplasty for Management of Severe Facial Deformity in B-Thalassemia Major Patient					
	Khamis Mohammed Alhassani, Abdulaziz Abdullah Bakathir, Ahmed Khamis Al Hashmi					
OP-076	Le Fort I osteotomy with iliac bone grafts and delayed dental implants for the rehabilitation of extremely atrophied maxilla Alparslan Esen, <u>Gökhan Gürses</u>					
00.00 00.00	Oral Abstract Session 11 Hall D					
00:00-09:00	Chairpersons: Yavuz Fındık, Burak Bilecenoğlu					
OP-077	Brown Tumors of the Jaw: Experience of Sultan Qaboos University Hospital, Oman					
	Abdulaziz Bakathir, Ahmed Al Hashmi, Mohammed Al Hashmi					
OP-078	Odontogenic Kearatocyst: A Case Report Ozan Kaan Venedik, Serpil Altundoğan, Murat Kaan Erdem					
OP-079	Treatment of Ameloblastomas in Mandible: Report of Three Cases					
OP-080	Ahmet Altan, <u>Sefa Çolak.</u> Emrah Soylu, Nihat Akbulut Conservative Management of Large Dentigerous Cysts in Children					
	Ayşe Özcan Küçük, <u>Mahmut Koparal,</u> Aydın Keskinruzgar					
OP-081	Minimally Invasive Management of Intraoral Vascular Malformations: Report of a Case and Literature Review <u>Nelli Yıldırımyan,</u> Öznur Özalp, Göksel Şimşek Kaya, Alper Sindel, Mehmet Ali Altay					
OP-082	Treatment results of jaw cysts managed by marsupialization or enucleation: A retrospective study					
OP-083	Esin Demir Erseçgin Central Giant Cell granuloma of the jaw: Is Radical and Chemotoxic treatments are justifiable?					
01 000	<u>Ahmed Al Hashmi,</u> Abdul Aziz Bakathir					
09:00-09:30	Coffee Break					
09:30-10:30	MAJOR SYMPOSIUM 6 Hall A					
	Chairpersons: Kaveh Shakib, Sertan Ergun, Selçuk Basa					
09:30-10:00	Impact of Balistics in Maxillofacial Trauma - Joseph Helman (USA)					
10:00-11:00	Coffee Break					
	MAJOR SYMPOSIUM 7 Hall A					
	Chairpersons: Tian Ee Seah, Sevil Kahraman					
11:00-11:30	Surgical Challenges in Asymetry Cases - Ülkem Cilasun (Turkey)					
11:30-12:00	Quest for Aesthetics - Velupillai Ilankovan (UK)					
12:00-12:30	Treatment Algorithms for the Use of Distraction Osteogenesis in OSA					
	Joseph Helman (USA)					





Registration	Courses	Poster Presentation Exhibition Symposias Oral Abstract Masterclass Social Events, Breaks Saturday, April 27 th , 2	019
12:30-7	13:30	Lunch	
12:30-7	13:30	MASTERCLASS 5 Ha	all A
		"Aesthetics of the Lower Face" - Velupillai Ilankovan (UK)	
12:30-7	13:30	MASTERCLASS 6 Ha	all B
		Mandibular Reconstruction: A Comprehensive Approach - Julio Acero (Spain)	
13:30-	15:00	MAJOR SYMPOSIUM 8 Ha	all A
		Chairpersons: Joseph Helman, Yavuz Sinan Aydıntuğ	
13:30-1 14:00-1	14:30	Current Concepts in Bone Regenerative Materials - Özgür Erdoğan (Turkey) Principles of Treatment of Oral Cancers; Local, Regional and Free Flaps Muhammed Davudov (Azerbaijan)	
14:30-1		Treatment Protocols of Latrogenic Lingual Nerve Injuries - Firat Selvi (Turkey)	
15:00-			
15:30-	16:30		all A
		Chairpersons: Doğan Dolanmaz, Ercüment Önder	
15:30-1 16:00-1		 Which Sinus Floor Augmentation Technique Causes More Inflammation? Sertan Ergun (Turkey) The Use of Iliac Bone Augmentation with Dental Implants in Management of Atrophic Maxilla - Cemil İşler (Turkey) 	
16:30-	17:00	Coffee Break	
17:00-	18:00	Oral Abstract Session 12 Ha	all A
		Chairperson: Fatih Şentürk	
	OP-084 OP-095	Intraoral approach to buccal lipectomy: A case series and reappraisal <u>Öznur Özalp, Gö</u> ksel Şimşek Kaya, Mehmet Ali Altay, Alper Sindel Investigation of the Behavior of Different Titanium Surfaces Against Corrosive Mouth Liquids Usive Derdiver, Abmet Cultageliu Özlap Özgül Umut Takin, Ergümant Önder	
(OP-086	<u>Uğur Derdiyok</u> , Ahmet Culhaoğlu, Özkan Özgül, Umut Tekin, Ercüment Önder Management of Thalassemia-Induced Facial Deformity with Bimaxillary Segmental Osteotomies Combined with Derma Filler: Report of A Case <u>Arif Sermed Erdem</u> , Esra Bolat, Öznur Özalp, Mehmet Ali Altay, Alper Sindel	
(OP-087	Lip repositioning as an alternative treatment of gummy smile: A case series <u>Büşra Karaca,</u> Hüseyin Alican Tezerişener, Öznur Özalp, Mehmet Ali Altay, Alper Sindel	
(OP-088	Investigation of the Effect of Two Different Osteotomy Designs on the Attachment of the Inferior Alveolar Nerve for Sag Split Ramus Osteotomy <u>Abdullah Özel.</u> Tansu Üzel, Sina Uçkan	ittal
(OP-089	Alveolar Distraction Osteogenesis In Wide Alveolar Cleft Patients Yavuz Fındık, Timuçin Baykul, Mehmet Fatih Şentürk, Tayfun Yazıcı <u>, Betül Kıran</u>	
(OP-090	Alveolar Cleft Repair with Bone Graft Harvesting from Anterior Iliac Crest: 3 Case Report Ümit Yolcu, Hilal Alan, Ramazan Serdar Esmer, Mahmut Koparal	
(OP-091	Effects of Lefort 1 Maxillary Impaction on Maxillary Sinus and Nasal Cavity Anatomies: A Three-dimensional Analysis Onur Koç, Hakan H. Tüz	



Saturday, April 27, 2019 Registration Courses Presentation Exhibition Symposias Oral Abstract Masterclass Breaks							
	17:00-18:00	Oral Abstract Session 13 Hall B					
		Chairperson: Kıvanç Bektaş Kayhan					
	OP-014	Management Of Mandibular Osteomyelitis Caused By Long-Term Steroid Uptake: A Case Report					
	OP-092	<u>Kemal Atakan Bayburt.</u> Özge Doğanay, Erdem Kılıç, Doğan Dolanmaz Survival of Dental Implants Inserted with External Sinus Lift Procedure					
		Damla Torul, <u>Tolunay Avci</u>					
	OP-096	Peripheral Giant Cell Granuloma Associated with Dental Implants Hilal Alan, Ayşe Özcan Küçük <u>, Bahanur Hilal Kisbet,</u> Mahmut Koparal					
	OP-098	Dental Implants in a Kidney Transplant Patient and Literature Review					
		Levent Ciğerim, <u>Mohammad Bsaileh</u> Evaluation of The Effects of Pre-emptive Intravenous Dexketoprophen Trometamol On Postoperative Pain In Orthognathic					
	OP-099	Evaluation of the Effects of Pre-emptive intravenous Dexketoproprien frometamol on Postoperative Pain in Orthognathic Surgery					
		Yusuf Nuri Kaba, Ahmet Emin Demirbaş, Nükhet Kütük, Dilek Günay Canpolat, Alper Alkan					
	OP-108	The Effects of PTH (1-34) and SERM (Raloxifene) on Osseointegration of Implants in Osteoporotic Bone Firas Mohsen, Ahmet Emin Demirbaş, Mustafa Karakaya, Cihan Topan, Nükhet Kütük, Alper Alkan					
	17.00 10.00						
	17:00-18:00						
		Chairperson: Alper Sindel					
	OP-100	Characteristics of Supernumerary Teeth and Molecular Genetic Factors Related to the Etiology of These Teeth Bilal Ege, <u>Muhammed Yusuf Kurt</u>					
	OP-101	Surgical Management of Central Giant Cell Granuloma: Case Report					
	OP-103	<u>Gülsün Aydoğmuş.</u> Türker Yücesoy, Doğan Dolanmaz Diagnosis and Surgical Treatment of Nasal Ectopic Tooth: A Rare Case Report					
	0F-103	<u>Ilhan Kaya,</u> Halil Tolga Yüksel					
	OP-104	Ankyloblepharon-ectodermal dysplasia-clefting (AEC) syndrome with alveolar synechia: A new syndrome?					
	OP-105	Belgin Gülsün <u>, Rıdvan Güler.</u> Utku Nezih Yılmaz, Mahmut Koparal Evaluation of the relationship between bruxism and airway patency in individuals with bruxism					
		Tufan Güzel, Müge Çına Aksoy, Hatice Akpınar					
	OP-106	Efficacy of Botulinum Toxin Type A for Treatment of Myofascial TMD Pain <i>Hatice Hoşgör, <u>Sezen Altındis</u></i>					
	OP-107	The Effect of Local Release Alendronate Applied With Bone Grafts In Maxillary Sinus Lifting In Rabbits on New Bone					
		Formation: A Micro-CT Analysis Study <u>Gökhan Yılmaz, </u> Ahmet Emin Demirbaş, Sedat Ünal, Yeşim Aktaş, Süheyb Bilge, Nükhet Kütük, Alper Alkan					
	17:00-18:00						
		Chairperson: Onur Gönül					
	OP-109	Local Anesthesia Knowledge of General Practitioners and Oral and Maxillofacial Surgeons Seda Kocvigit					
	OP-110	Mandibular angulus fracture due to bisphosphonate-related osteonecrosis					
	OP-111	Mehmet Emre Yurttutan, <u>Osman Akıncı</u> Sugammadex Experiences in Oral and Maxillofacial Surgery Ayşe Hande Arpacı, <u>Ozan Kaan Venedik.</u> Erdal Erdem Retrospective Analysis of Maxillofacial Region Trauma in 30 Patient <u>Mehmet Emrah Polat.</u> Saim Yanık					
	OP-112						
	OP-113	Our Experience With Laryngeal Mask Airway in a Case with Unpredictable Difficult Intubation in Oral and Maxillofacial					
		Surgery Ayşe Hande Arpacı, <u>Ozan Kaan Venedik,</u> Erdal Erdem					
	OP-114	Managing A Rare Life-Threatening Complication During Orthognathic Surgery: Nasotracheal Tube Damage Dilek Günay Canpolat, <u>Zeki Özalp</u> , Seher Orbay Yaşlı, Emrah Soylu					
	OP-115	Closed Reduction of The Fractured Arcus Zygoma by a Hook Traction					
		Utku Nezih Yılmaz					
	20.00-00.00	Closing Party and Award Ceremony					



ORAL PRESENTATIONS



The Effect of Different Biomaterials on the Stability of Implants Placed Immediately

<u>Gökhan Gürses</u>, Alparslan Esen Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Necmettin Erbakan University, Konya, Turkey

Introduction: The aim of this study was to investigate the contribution of different biomaterials placed on the buccal surface of implants placed immediately on implant stability and bone formation.

Materials-Method: The total number of patients in our study is 15. All volunteers are systemically healthy and has indication of extraction on tooth which has two adjacent teeth in anterior and premolar region of maxilla. All patients were divided into three groups as graft, platelet-rich-fibrin and control. All teeth were extracted under local anaesthesia with concurrent implant placement. The ISQ values at T0 were recorded. The buccal gaps were filled with related materials according to the groups. At the fourth month, T1 ISQ values were recorded and the implants were loaded. Vertical and horizontal bone resorption were measured radiographically by comparing preoperatively and in the ninth month.

Results: No significant difference was found among the groups in terms of age and gender (p = 0.238). There was no statistically significant difference in terms of mesial, distal and horizontal crest losses (p = 0.455 / 0.743 / 0.367). And also, no statistically significant difference was found among the three groups in terms of T1-T0 mesio-distal and bucco-palatal values (p = 0.212 / 0.323).

Conclusion: Biomaterial application has a positive effect on the stabilization of implants and buccal bone formation in cases with buccal gaps more than 2 mm. But the applied biomaterials have not been found superior to each other.

Keywords: bone loss, immediate implant, resonance frequency analysis



Effects of Injectable Platelet Rich Fibrin(I-PRF) on Implant Stability: A Preliminary Study

<u>Serhat Güvenç</u>, Mustafa Cenk Durmuşlar Department of Oral and Maxillofacial Surgery, Bulent Ecevit University, Zonguldak, Turkey

Objective: The success of reconstruction, oral implant surgery and periodontal treatment in oral and maxillofacial surgery depends on bone regeneration. Bone grafts, barrier membranes and healing factors are used for bone regeneration and reconstruction. I-prf has a positive effect on bone regeneration owing to the high rate of healing factors. The aim of this study is to evaluate the effects of i-PRF applications on stabilization and implant-bone healing time.

Materials-Methods: This study was performed on patients with at least two extraction area in the same region or symmetrically in mandible. Patients with any systemic disease and having a contraindicated condition were not included in the study. Patients with inadequate bone level for implant surgery were not included. In the control group, implant was placed in one of the prepared socket for implant insertion without any procedure and the other group was implanted after the application of i-PRF to the prepared socket. Resonance frequency analysis(RFA) method was used to evaluate the stabilization after implant surgery. Measurements were made at the time of implant placement, and after 1,2 and 4 weeks.

Results: 40 implants were successfully placed. After 1 month follow up, no complications were observed in both groups. The i-PRF application provided an increase in ISQ(İmplant stability quotient) values during all periods examined

Conclusion: In recent years, i-PRF has been used frequently. i-PRF has more immune system elements (leukocytes) and healing factors than PRF. it may be considered that i-PRF has a positive effect on bone healing and osseointegration time

Keywords: implant, i-PRF, osseointegration



OP-003 Symphysis Graft in Dental Implant Surgery: Report of Three Cases

<u>Serkan Yıldız</u>, Mehmet Kemal Tümer, Aras Erdil, Mustafa Sami Demirsoy University of Gaziosmanpasa, Faculty of Dentistry, Oral and Maxillofacial Surgery Department, Tokat, Türkiye

Objective: Atrophic alveolar ridges are a common problem in implant dentistry. Some of the contributing ethiological factors are agenesis, trauma, facial growth disturbances, early loss of teeth. Primary stability of dental implants depends on alveolar bone quality and quantity. Due to, autogenous graft remains a gold standard in oral surgery, to obtain ideal clinical outcomes alveolar ridges can be augmented with autogenous grafts. The most common intraoral donor sites are mandibular corpus, ramal and symphyseal sites. Mandibular symphysis region has a proper cortical-spongeous bone ratio and contains a high amount of spongious bone.

Case: 1. Because of previous maxillofacial trauma, the patient had lost his upper four incisor teeth and so had horizontal ridge inadequacy.

2. The patient had lost one of the upper incisor teeth due to odontogenic infection which had caused alveolar bone destruction.

3. Due to horizontal and vertical defects of the anterior maxilla and posterior mandible symphysis graft harvesting was planned under general anaesthesia. During operation, a mandibular fracture occurred and reconstructed.

Conclusion: Mandibular symphysis region is a highly accessible region, and autogenous grafts can be harvested in out-patient settings. Aside from osteoinductive properties, autogenous grafts have success rates up to %95. Despite desirable features, complications like temporary (%33.87) and persistent (%12.02) sensory loss of teeth, wound dehiscence (%1.63) and pulp necrosis (%1.09) have been reported in the literature.

Keywords: dental implant, mandibular fracture, symphysis graft



The clinical success of implants placed in mandible after delayed alveolar ridge split with a modified corticotomy technique

<u>Gürkan Abdioğlu</u>, Zeynep Gümüşer, Necip Fazıl Erdem Oral and Maxillofacial Surgery, Faculty of Dentistry, Marmara University, İstanbul, Turkey

Objective: Alveolar ridge split procedure is commonly performed for horizontal augmentation of narrow ridges which would preclude implant placement. The traditional technique requires simultaneous ridge split and implant placement for patients with horizontal alveolar ridge deficiency. However this could be highly risky for mandible in terms of forming a greenstick fracture and thus the survival of the buccal bone plate. Delayed alveolar ridge split technique can reduce the risk of complications such as malfracture especially in the mandible. In order to lessen these risks, we performed the delayed alveolar ridge split with a modified corticotomy technique, in such 45 degree of beveled vertical corticotomies in buccolingual direction.

Materials-Methods: A total of 5 patients with 7 narrow edentulous posterior mandibular ridges of 3-4mm were included in this clinical study, and 14 implants were placed. Primary stability and osseointegration stability of implants were measured using resonance frequency analysis. Postoperative 3-month radiological images were taken. Also complications related to ridge splitting were recorded.

Results: All 14 implants placed with this technique were osseointegrated with high values of resonance frequency. Greenstick fractures of the buccal plates were performed without any complication. Postoperative 3-month radiological images showed no buccal bone plate resorption which could be an indicator of well vascularization of the buccal plate via the periost.

Conclusion: The delayed alveolar ridge splitting with this modified corticotomy technique is even safer and predictable approach as compare to single stage ridge split in the mandible. This technique presents minimal risk of complications.

Keywords: alveolar ridge split, implant success, mandible



A Conservative Approach for Closure of Medication-Related Osteonecrosis Defects in Maxilla

<u>Birkan Tatar</u>, Onur Şahin

Oral and Maxillofacial Surgery, Izmir Katip Celebi University, Izmir, Turkey

Objective: Medication-related osteonecrosis of the jaw (MRONJ) is a disease mostly seen after surgical trauma, caused by antiresorptive or antiangiogenic medications and the various treatment options are still debatable. The surgical treatment for MRONJ is basically removal of the necrotic bone and defect closure using a flap. Trials using local mucosal flaps have exhibited high failure rates owing to poor vascularity. Pedicled buccal fat pad (PBFP) is a highly vascularized flap type which comprises angiogenesis promoting fat-derived stem cells. Leukocyte and platelet rich fibrin (L-PRF) is also a promising material comprising growth factors which improves healing in MRONJ patients with defects of poor vascularity. The aim of this study is to present a conservative surgical strategy in MRONJ treatment.

Case: A 63-year-old female patient receiving 50 mg Denosumab subcutaneously in every 6 months for osteoporosis treatment presented and a radiolucent lesion with well-defined borders was detected at the right maxillary posterior area. Sequestrectomy was performed by complete removal of necrotic bone and sharp bone edges were rounded off. To close the wound site and to help the recovery of the surgical site, PBFP and L-PRF were used without additional flap surgery.

Conclusion: Wound closure with L-PRF and PBFP is an alternative treatment method especially in large defects that can be effective in exposed bone coverage and surrounding tissue healing at the posterior maxillary region in MRONJ patients.

Keywords: medication-related osteonecrosis of the jaw, maxilla, osteonecrosis of the jaw, platelet rich fibrin, buccal fat pad



Evaluation of the Effect of Manual Lymphatic Drainage Therapy on the Edema, Pain and Trismus After Bilateral Mandibular Third Molar Surgery

<u>Nuri Ünal</u>¹, Yasemin Kayalı², Birkan Tatar¹, Murat Ulu¹ ¹Izmır Katip Çelebi University Faculty of Dentistry Department of Oral and Maxillofacial Surgery ²Izmır Katip Çelebi University Atatürk Training and Research Hospital Department of Physiotherapy and Rehabilitation

Objective: To evaluate the effects of manual lymphatic drainage (MLD) on facial edema, trismus and pain in patients who underwent bilateral mandibular third molar surgery.

Materials-Methods: 46 patients who underwent bilateral mandibular third molar surgery were divided into 2 groups. One group (treatment) received MLD from 1st to 3rd postoperative day, besides postoperative medications. The other group (control) received medications and post op advices. For edema evaluation, facial volumetric measurements with 3dMD were used. To evaluate patients' perception, visual analog scale for pain was used. A caliper placed between upper and lower incisors was used to measure trismus.

Results: Statistically significant difference was found between groups in the amount of maximum developed edema but no difference was found in what day the edema peak occurred. It was found that treatment group showed faster and greater regression of swelling compared with control group. Manual lymphatic drainage was effective in relieving pain according to visual analogue scale (VAS) in these patients and in edema perception.

Conclusion: Objective measures showed that MLD is effective in edema regression to anticipate maximum swelling and accelerate edema regression. Regarding the pain, it was found that this is related to the amount of developed swelling. Manual lymphatic drainage was effective in edema, pain and trismus in mandibular third molar surgery postoperatory.

Keywords: edema, manual lymphatic drainage, third molar surgery, manual therapy, 3dMD



Long-Term Success of Single-Molar Implant Restorations

Mehmet Melih Omezli, Ferhat Ayranci, <u>Mustafa Ay</u> Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Ordu University, Ordu, Turkey

Objective: Dental implants have become a valuable alternative to conventional dental prostheses. Titanium dental implants have been proven to be safe and effective in large series of studies. This retrospective study compared the long-term survival, marginal bone level, peri-implant health and complications of single-molar implants inserted in posterior regions of maxilla and mandible.

Materials-Methods: Forty patients with single implants (20 maxilla, 20 mandible) in the posterior region were included in this study. All patients were operated by a single experienced surgeon. Prostheses of all patients were made 3 months after the operation. Panoramic radiographs were obtained from the patients at 1, 3, 12 and 24 months. Gingival index, plaque index, marginal bone loss, mobility and peri-implantitis were recorded during the follow-up visits.

Results: The implant survival rate was 100 %. No significant difference was found in maxilla and mandible in all parameters.

Conclusion: Single-tooth implant restorations in the molar regions constitute a reliable treatment option than conventional single crown restorations.

Keywords: Dental implant, marginal bone loss, panoramic radiography



Primary/secondary stability of implants as a predictive factor of bone-implant contact: an animal Micro-CT study

<u>Mustafa Ozcan</u>, Cenk Mehmet Haytac Department of Periodontology, Faculty of Dentistry, Cukurova University, Adana, Turkey

Objective: The success and survival of dental implants depend on many biological factors including primary and secondary stability. This animal study aims to evaluate the correlation of primary and secondary stability values on the bone-implant contact percentage (BIC%).

Materials-Methods: 66 implants were placed on iliac cortical crests of 8 sheep. The primary (immediately after placement) and secondary (post-operative 4 weeks) stability of implants were measured with Ostell device and were quantified as the implant stability quotient (ISQ). Three dimensional BIC%'s were analyzed with microcomputed tomography (Micro-CT).

Results: A positive significant correlation was found between the primary stability and BIC ratio values (r=0.411, P<.05). A positive significant correlation was also found between the secondary stability and BIC ratio values (r=0.691, P<.05).

Conclusion: The results of the study have shown that the primary and secondary stability were strongly correlated with the 3D BIC % indicating that the stability values may reflect the amount of bone volume around the implants which eventually affect the success and survival of the implant treatment.

Keywords: primary stability, secondary stability, bone-implant contact, Micro-CT



Evaluation of the Effect of Injectable Platelet-Rich Fibrin Applied to Bone Graft on New Bone Formation and Graft Resorption by Immunohistochemistry and Histomorphometry

<u>Keremcan Kuru</u>¹, Hüseyin Akçay¹, Fatma Şimşek² ¹Izmir Katip Çelebi University Department of Oral and Maxillofacial Surgery ²Izmir Katip Çelebi University Department of Histology

Objective: The aim of this study was to evaluate the effects of allograft combined with i-PRF liquid which is obtained with low speed centrifugation concept on new bone formation by histomorphometry and immunohistochemistry.

Materials-Methods: In 25 extraction areas, the sockets were filled with the i-PRF& allograft mixture and covered with PRF membranes obtained simultaneously. In 25 sockets in the control group, stabilization of the clot was just ensured. In all cases, only cross matress sutures were performed with flapless approach. At the end of the 2-month recovery period, during the implant placement procedure bone tissue samples were taken for histological examination using trephine bur. After socket preparation with drills, dental implants were placed and the primary stabilization values were measured with Osstell Mentor device.

Results: According to the results of histomorphometric analysis of bone tissue samples, there were significantly more new bone formation in the study group compared to the control group and socket preservation studies in which only allograft used in literature. In immunohistochemical examination, more cellular immunoreactivity was observed in the study group against ALP, OCN and PCNA primary antibodies compared to the control group. When the primary stability values of the implants were compared, statistically high ISQ values were obtained in the study group.

Conclusion: Further clinical and experimental studies are needed to observe the long-term effect of this method which we observed accelerated bone formation and increase the amount and quality of the newly formed bone according to the results of our study.

Keywords: platelet rich fibrin, putty graft, histology, augmentation



Investigation of The Effect of Resorption Patterns in Different Bone Types on Stresses Around The Implant With Finite Element Analysis

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Objective: The aim of this study was to investigate the effect of different resorption patterns in 4 different bone qualities on stress distribution around implant.

Materials-Methods: A 3-dimensional finite element model of a mandibular section in four different quality with missing second premolar and a 4.1x10-mm screw-shape dental implant with its superstructures were used in this study. A total of nine bone resorption models with an implant were created: a nonresorption (Control group) model and eight variations, in which four different resorption depth (1-2-4-6 mm) were combined with two horizontal (2-4 mm) resorption. Buccolingual forces were applied to buccal cusp.

Results: The stresses in the spongiose bone are very low in models in which the defect margin remains within the cortical bone. This indicates that presence of cortical bone contacting the implant, even in a bone defect, improves the biomechanical performance of implants. But stress in cortical bone is lower in models with defect margin in spongiose bone. In order to maintain the balance, it was observed that the stresses in the spongiose bone increased significantly and so on this condition may cause progressive marginal bone loss. Loading condition, in the models where the defect margin is at the cortical-spongiose bone junction, it is seen that the increase in defect width increases the stress in cortical, spongiose bone and implants.

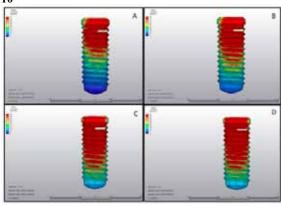
Conclusion: With the limitations of this study, As bone resorption progresses, the increasing stresses in the spongiose bone and implant under oblique load may result in implant failure.

1 Materials Young's modulus Poisson ratio (GPa) Titanium (implant, abutment) 110 0.35 Cortical bone 13,7 0,3 Spongy bone (D1, D2, D3) 1,37 0,3 Spongy bone (D4) 1,1 0,3 Cr-Co alloy 218 0,33 Feldspathic porcelain 82,8 0,35

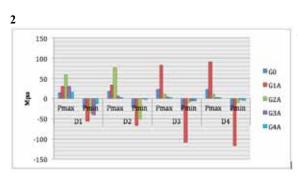
Keywords: Bone resorption, Dental implant, Bone types, Finite element analysis

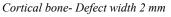
Mechanical properties of the finite element models

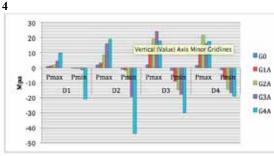




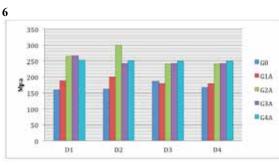
Von Mises stresses of implants in G2A group A: D1 B: D2 C: D3 D: D4



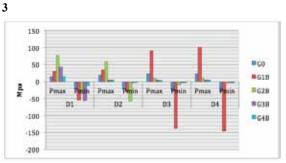




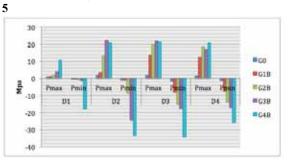
Spongiose bone- Defect width 2 mm



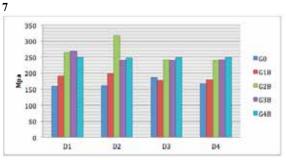
Von Misses stress- Defect width 2 mm



Cortical bone- Defect width 4 mm

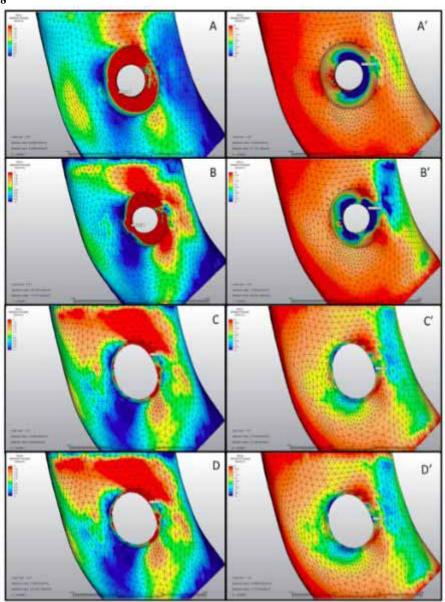


Spongiose bone- Defect width 4 mm



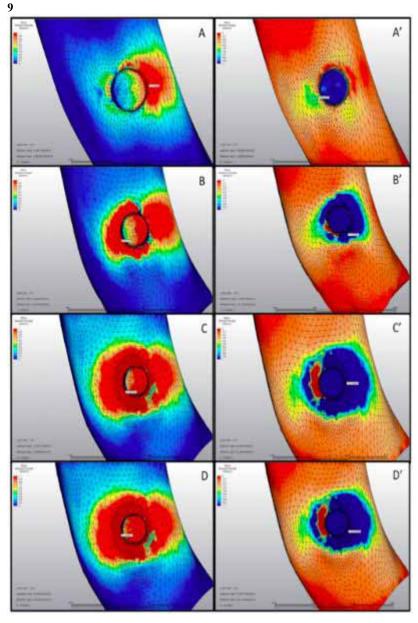
Von Misses stress- Defect width 4mm





Pmax-Pmin values of cortical bone in G2A group A-A': D1; B-B': D2; C-C': D3; D-D': D4





Pmax-Pmin values of spongiose bone in G2A group A-A': D1; B-B': D2; C-C': D3; D-D': D4



The effect of screw tent pole technique on posterior atrophic mandible: a split-mouth study

<u>Gözde Işık</u>¹, Tayfun Günbay¹, Murat Sezak² ¹Department of Oral and Maxillofacial Surgery, School of Dentistry, Ege University, İzmir, Turkey ²Department of Pathology and Laboratory Medicine, School of Medicine, Ege University, İzmir, Turkey

Objective: The aim of this study is to assess the histopathological and radiological features of autogenous block bone graft and screw tent-pole techniques in same individuals for treatment of atrophic posterior mandible.

Materials-Methods: The authors designed a split-mouth study composed of patients who have bilaterally atrophic mandible. The predictor variable was treatment outcomes of screw tent-pole technique and injectable platelet rich fibrin as an enriched bone graft matrix. The primary outcome variable was assessed the amount of bone augmentation in 6-months postoperatively. The secondary outcome variable was compared to percent of vital bone and residual graft material within autogenous block bone graft (test group) and screw tent-pole (study group). P value was set at.05 that considered significant.

Results: The sample composed of 11 patients (7 female, 4 male; mean age 50,92) for treatment of bilaterally atrophic mandible. The amount of alveolar bone height in control group was found in higher than test group (p<0,05), while, there was no statistically significant difference between the study groups on alveolar bone volume. The study variables on histopathological results, was showed statistically significant difference between the study groups for residual graft material (p<0,05).

Conclusion: The present study concludes that screw tent-pole technique can be alternative for autogenous bone block graft especially in horizontally alveolar bone defects. Also, i-PRF as an enriched bone graft matrix is accelerate treatment outcomes of allogeneic graft material by stimulating bone regeneration. Therefore, future studies are needed to confirm of potential regeneration effect in i-PRF with different study groups.

Keywords: Bone augmentation, Autogenous block bone graft, Platelet concentrations, Screw tent-pole technique, Sticky bone



Rehabilitating Wide Maxillary Defect With Distraction Osteogenesis And Khoury Technique

Yavuz Fındık, Timuçin Baykul, Gülperi Koçer, Mehmet Fatih Şentürk, Tayfun Yazıcı, <u>Halime Karakurt</u> Oral and Maxillofacial Surgery, Süleyman Demirel University, Isparta, Turkey

Objective: Maxillary and mandibular bone defects can result from injury, congenital defect or accident, or as a consequence of surgical procedures when treating pathology or defects affecting jaw bones. And with conventional bone grafting techniques, it is not possible to closure these kind of defects. Distraction osteogenesis has become a very popular technique, as the ability to reconstruct combined deficiencies in bone and soft tissue makes this process unique and invaluable to all types of reconstructive surgeons.

Case: The aim of this article is to present the case of a 52-year-old female patient, who, in 2016, was operated at another center for tumour resection. Anterior partial maxillectomy was performed. After these, patient referred to our center and we treated the wide anterior maxillary bone and soft tissue defect by using bilateral alveolar cleft distractor. After narrowing the wide defect with distraction osteogenesis, khoury technique was used for rehabilitating the small defect.

Conclusion: As a result, using cleft distractor is an effective method for rehabilitation of the large maxillary defects.

Keywords: Distraction osteogenesis, Khoury technique, maxillary defect, maxillectomy



Recostructing Palatale After Huge Pleomorfic Adenoma Excision: Buccinator Musculomucosal Flap

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Objective: The aim of this study was to evaluate the success of the reconstructing palatal defect with buccinator musculomucosal flap (BMMF) after excision of giant pleomorphic adenoma in maxilla.

Case: A 71-year-old female patient was referred to our clinic with complaints of dysphagia and speaking difficulty. Cone beam computed tomography showed a maxillary radiodense lesion of approximately 25x41x45 mm in size, including two half-jaws in the maxilla palatinal region. The lesion was associated with the maxillary sinus at the posterosuperior and closed to the nasal cavity at he anterosuperior. Biopsy results were consistent with pleomorphic adenoma (PA). Excision of PA was performed under general anesthesia. BMMF was obtained from right cheek to reconstruct the defect after PA excision. Mucosa of the donor site closed primary. And the defect of tumor excision site was closed primary too with BMMF. Histopathological examination after surgery revealed the tumor, which was separated by a thin fibrous capsule from the salivary gland, beneath the multilayer squamous epithelium. And it confirmed the initial examination. Clinical and radiological follow-up of 6 months did not reveal any complications.

Conclusion: We recommend the use of BMMFs due to ease of performing and the successful results for reconstructing maxilla after tumor excision operations especially the anatomical structures like nasal cavity and maxillary sinus will be exposed.

Keywords: buccinator, musculomucosal, flap, pleomorphic adenoma



Management Of Mandibular Osteomyelitis Caused By Long-Term Steroid Uptake: A Case Report

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Objective: Osteomyelitis is an inflammatory disease of the bone that usually involves the medullar cavity. One of the reasons of osteomyelitis has been associated with long-term used medications such as steroids. Although steroids have been used for the treatment of many diseases, they have side effects in long-term usage. We would like to present the management of mandibular osteomyelitis resulted from corticosteroid therapy in a patient that was candidate for renal transplantation.

Case: A65 years old male patient was referred to our faculty with the chief complaint about mandibular infection. He underwent cardiac operation 3years ago and had renalfailure in the terminal period. Also, the patient had been receiving long-term steroid treatment since two years. The lesion extended from the midline to the basis of the left mandible. After obtaining 3Dprinted solid model of the patient, straight reconstruction plate was bended before the surgery. The currettage of the osteolytic lesion located on the lower anterior region was performed and prebended plate was fixed to the jaw, intraorally. None of the complications was observed in the postoperative period.

Conclusion: The current general consensus about the treatment for osteomyelitis of the mandible is surgical approach which is the removal of the affected tissues. The revealed relationship between diffuse kidney conditional and dental status of patients, at the stages of preparation and after kidney transplantation indicates, that a the presence of infection areas may cause to affected negatively the main disease, increase the risk of transplant rejection. Stabilization of bone without employing bone graft by reconstruction plate decreases the possibility of pathologic fracture and improves prognosis.

Keywords: long-term steroid treatment, osteomyelitis, reconstruction



OP-015 Bruxism: Does it Affect the Mandibular Trabecular Bone Structure?

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Objective: Fractal analysis, a mathematical image processing method, is used in medicine to learn about these verity and progress of the disease ortodiagnose a potential disease. The increase of fractal dimension (FD) is associated with an increase in the complexity of the structure. The aim of this study was to investigate the effect of bruxism to FD of mandibular trabecular bone on digital panoramic radiographs (DPR).

Materials-Methods: 106 bruxist and 106 non-bruxist patients were included in the study. The diagnosis of bruxism was made according to anamnesis and clinical findings of participants. Bilateral selected three region of interests (ROI) on DPRs were: ROI-1-mandibular condyle; ROI-2-mandibular angle; ROI-3-area between the apical regions of the mandibular second premolar and first molar teeth. FD values were compared between bruxist and non-bruxist groups for each ROI. Statistical analysis were performed using Mann-Whitney U test.

Results: FD measurements of right mandibular condyle (ROI-1) only showed a statistically significant difference (p = 0.041) between bruxist and non-bruxist individuals. FD values measured from bruxists (1.40±0.09) were lower than non-bruxists (1.42±0.08).

Conclusion: Bruxism affect the mandibular trabecular bone structure on only condyle region.

Keywords: Bruxism, Fractal Analysis, Mandible, Trabecular Bone



OP-016 The Relationship Between Dentistry and Forensic Medicine

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Objective: A dentist should have knowledge about in which forensic issues he/she can help forensic medicine even though he/she has not received forensic dentistry education. The aim of the study was to have an opinion about on which issues the relationship between forensic science and dentistry focuses.

Material-Methods: In this retrospective study, the consultation forms of the patients who were referred from Tokat Gaziosmanpaşa University, Faculty of Medicine, Department of Forensic Medicine to Tokat Gaziosmanpaşa University, Faculty of Dentistry between January 2014 and January 2019 were examined. Demographic information such as age and gender, especially the reason for consultation was obtained from these forms.

Results: In the study, the consultation forms of 63 patients (40 females, 23 males) were reviewed. The ages of the patients ranged from 9 to 77 (mean: 28.33 \pm 16.1). The reasons for consultation of patients were listed as age determination (n=32, 50.8%), trauma (n=30, 47.6%) and malpractise (n=1, 1.6%). In patients who were exposed to trauma, physical assault (n=17, 56.7%), traffic accident (n=5, 16.7%), falling (n=2, 6.7%), and gunshot injury (n=1, 3.3%) were among the leading causes of trauma. In the trauma cases, the hard tissues affected in the maxillofacial region were teeth (n=14, 46.7%), symphysis mandible (n=3, 10%), angulus mandible (n=2, 6.6%)

Conclusion: In their professional life, dentists can be appointed as experts for forensic events. Therefore, the dentist should pay attention to the trainings on approach to the forensic case and judicial examination.

Keywords: trauma, dentistry, forensic medicine, age estimation



Management of Central Giant Cell Granuloma with Denosumab and Calcitonin: Two Case Reports and Review of Current Treatments

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Objective: Central giant cell granuloma is a benign aggressive, destructive, intraosseous lesion of jaw that occurs before the age of 30 years and predominantly in females. It may cause local destruction of bone and displacement of the teeth. The common therapy is curettage or resection, but in recent years also conservative therapy is commonly used. We present 2 case reports of Central giant cell granuloma lesion that was systemically treated with denosumab and calcitonin.

Case: Each of the 2 patients were examined clinically and radiologically and a biopsy was taken. Central giant cell granuloma was the definitive diagnosis. The first case is about a 23-years-old pregnant woman with a lesion located in the mandible. Miacalcin injection was chosen and applied every day and stretched to 2 years. The second case is about a 39-years-old man with a lesion in the maxilla. Denosumab (Prolia) injections was applied monthly and stretched to 18 month. After the end of the treatment callus formation was determined both cases. After the follow up of the 2 cases relapse was not seen

Conclusion: The conservative treatment indications of this lesion are the patient's age, lesion size, patient's demand, aggresive nature of the lesion. Systemic therapy with calcitonin and denosumab to avoid functional and aesthetic deformities in young patients is a non-surgical, minimally invasive and preferred method of treatment.

Keywords: Calcitonin, Central Giant Cell Granuloma, Denosumab, Jaw, Non-Surgical Treatment



OP-018 Sialolithiasis: Case Series

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Objective: Sialolithiasis is most common disorder of major salivary glands.

Case: Case 1: A-60-year old male patient presented with continuous pain, swelling and inflammatory discharge in left sublingual area. Radiographically, there was a 3 cm x 2 cm sized stone in the left sublingual region.

Case 2: A-65-year old male patient presented with pain after eating, swelling and inflammatory discharge in left sublingual area. Radiographically, there was a 3 cm \times 2 cm sized stone in the left sublingual region.

Case 3: A-83-year old female patient presented with pain and swelling in left sublingual area especially after eating. Radiographically, there was a 3 cm x 2 cm sized stone in the left sublingual region.

Three dimensional images was requested from patients who applied our department for detailed examination of the lesions. Salivary gland stones were excised and sent for microbiological and histopathological examination. In all three cases, drains were placed in the surgical sites. There were no intraoperative and postoperative complications. Routine controls of patients are in progress.

Conclusion: The purpose of treatment of sialolithes is to provide the normal secretion of saliva. The growing stone causes increasing obstruction of salivary secretion and this situation leads to swelling, pain, and infection of the gland. The treatment of choice is the removal of the sialolith by an intraoral approach.

Keywords: Pain, Sialolithiasis, Swelling



Patients' Awareness and Knowledge About Oral & Maxillofacial Surgery

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Objective: This study aims to evaluate patients> awareness of oral and maxillofacial surgery and to investigate their knowledge about oral and maxillofacial surgeons.

Materials-Methods: A questionnaire was handed out to 506 patients who admitted to Istanbul Medipol University, School of Dentistry. The gathered data were statistically analyzed with the software SPSS Statistics 22. P<0.05 was considered statistically significant.

Results: 61.9% of the participants consisted of female patients, whereas 38.1% were male patients. As for educational status of the patients, 38.9% were college graduates, 31.2% were high school graduates, 25.3% were primary school graduates and 4.5% had post graduate degrees. 72.3% of these patients have had dental procedures before. Most patients (82.8%) expressed a preference for having a dentist trained in oral and maxillofacial surgery to perform minor oral surgical procedures. 33.4% of the patients would prefer a dentist performing such procedures to be recommended by their family or friends. 16% would prefer an older dentist and 12.6% a physically strong dentist for these procedures.

Conclusion: Our study demonstrated a low level of awareness of oral surgery among patients. Even though majority of patients had many confusions, patients having higher level of education tend to be more aware of this speciality.

Keywords: oral surgery, patients' knowledge, patients' misconceptions



The Assessment of The Position of The Mandibular Canal And Mandibular Third Molar On Cone-Beam Computed Tomography Images

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Objective: The objective of this study is to assess the anatomic relationship between the mandibular canal and the mandibular third molar on cone-beam computed tomography images.

Materials-Method: Cone-beam computed tomography images to assess the positional relationship between the corresponding third molars and mandibular canal were used in this study. Cone-beam computed tomography images of 152 patients were evaluated.

Results: Two hundreds thirteen third molars were examined. The mandibular canal relative to the roots of the mandibular third molar was on the apical side (51.17 %), followed by the buccal side (21.60 %), the lingual side (22.53 %), and then between the roots (4.70 %). Fifty three (24.88 %) third molars had no direct contact while 160 (75.12 %) third molars had a close relation with the mandibular canal. When the mandibular canal was lingually positioned, the percentage of the mandibular canal contacts with the mandibular third molar was higher.

Conclusions: To know anatomical relationship between mandibular canal and mandibular third molar may be helpful to make adequate surgical planning to avoid or reduce nerve injury.

Keywords: cone-beam computed tomography, inferior alveolar nerve, mandibular third molar

Figure 1



Position of the mandibular canal in apical position

Figure 2

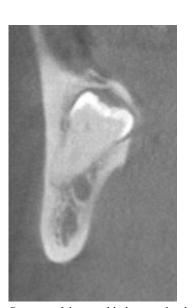


Position of the mandibular canal in buccal position



Figure 3

Figure 4





Position of the mandibular canal in lingual position Position of the mandibular canal in interradicular position



Soft and Hard Tissue Changes in the Oral and Maxillofacial Region in Patients with Neurofibromatosis: A Rare Case Report

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Objective: Neurofibromatosis (NF) is a group of autosomal dominant genetic disorders characterized by multiple cutaneous lesions and tumors of the central and peripheral nervous system. NF is categorized into two genetically distinct subtypes namely, NF type-1 (NF-1) and NF type-2 (NF-2). Neurofibromatosis 1 (NF-1) is a neurocutaneous-skeletal disorder with variable phenotypic expression and an incidence of 1:3,000 worldwide. The disease is characterized by a large number of manifestations in different organs and tissues and also affects multiple regions of the orofacial system. Craniofacial skeletal symptoms of the disease are observed in the jaw deformations and impacted, missing and displaced teeth can also be seen. The purpose of this report is to present a case of NF1.

Case: A 23-year-old male patient was referred to the Department of Maxillofacial Surgery, Faculty of Dentistry, Adiyaman University due to abscess of molar teeth. As a result of the panoramic radiography taken from the patient, the second and third molar teeth were impacted in the left mandibula. In addition, it was learned that neurofibromatosis was diagnosed when the patient>s medical records were examined. The patient>s impacted teeth and surrounding tissues were operated under general anesthesia.

Conclusion: In neurofibromatosis, bone and soft tissue involvement can be seen in the maxillofacial region. They are also lesions that can cause the impacted teeth.

Keywords: Neurofibromatosis, NF1, maxillofacial region



Treatment of A Patient with Amelogenesis Imperfecta with Surgery First Method

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Objective: The aim of this study was to present the surgery first treatment of a patient with amelogenesis imperfecta who had a skeletal deviation of mandible.

Case: A 17-year-old female patient was admitted to our clinic with the complaint of tooth and jaw irregularity. She had a skeletal Class III relationship and the mandible was deviated 5 mm to the right side. Treatment plan was determined as maxillary expansion, bilateral sagittal split osteotomy followed by prosthetic rehabilitation. After the maxillary expansion, surgical phase was started. Because of no fixed orthodontic treatment was applied intermaxillary fixation was achieved by 1.6x10 mm mini-screws. After the surgical procedure, ideal position of mandible, midline and the skeletal Class I relationship was achieved.

Conclusion: Intermaxillary fixation can be achieved with mini-screws without using fixed orthodontic appliance in surgery first cases.

Keywords: amelogenesis imperfecta, sagittal split ramus osteotomy, surgery first approach



A Triad of Temporomandibular Joint Ankylosis, Mandibular Retrognathia and Severe Obstructive Sleep Apnoea

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The surgical management of paediatric patients with temporomandibular joint (TMJ) ankylosis, mandibular retrognathia and obstructive sleep apnoea (OSA) is challenging. We report a nineyear-old boy who presented to the Department of Dental & Maxillofacial Surgery, Sultan Qaboos University Hospital, Muscat, Oman, in 2016 with complaints of limited mouth opening, loud snoring and excessive daytime sleepiness. He was diagnosed with TMJ ankylosis, mandibular retrognathia and severe OSA. The patient initially underwent mandibular distraction and, subsequently, release of the TMJ ankylosis and rib graft reconstruction. The overall patient outcome was successful, with improvement in OSA-related symptoms, good facial symmetry and adequate mouth opening.

Keywords: Temporomandibular Joint Disorders, Temporomandibular Ankylosis, Retrognathia, Obstructive Sleep Apnea, Case Report



Evaluation of The Effect of Mandibular Length and Height on The Sagittal Split Ramus Osteotomy Rigid Internal Fixation Techniques: A Finite Element Analysis

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Objectives: One of the major concerns after mandibular advancement with sagittal split ramus osteotomy surgery is post-operative stability and relaps. Though there is no consensus on the ideal fixation technique or its relation with mandibular height and length. The aim of this study is to assess stress distribution on the fixation units after sagittal split ramus osteotomy and its relation with different mandibular heights and lengths.

Methods: Finite element models of mandibles with different heights and lengths were created. Sagittal split ramus osteotomy and 7 mm advancement was simulated on these models prior to fixation with miniplate, hybrid or inverted L systems. 200 N force was applied from the incisal edge and the stress distribution on the fixation systems and the adjacent bone was evaluated.

Results: The maximum stress was measured on the miniplate system and least stress was measured on the inverted L system. The stress was higher in the longer and thinner models, also the increase in length affected the stress change unfavorably comparing to the decrease in height. The mandibular models with greater height shared the stress with fixation units resulting a homogenous stress distribution. The least displacement was seen in hybrid system and the stress was reduced when a bicortical screw used with a miniplate system.

Conclusion: Based on the results of this study, when sagittal split advancement osteotomy is planned for a rather long or thin mandible, using the hybrid system for fixation should be considered since it is biomechanically advantageous.

Keywords: orthognathic surgery, FEA, hybrid technique



OP-025 Multidisciplinary Treatment of Oligodontics and Lateral Openbite Case

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Objection: Open bite malocclusion is one of the most difficult cases in dentistry. This malocclusion is not only a problem related to the dental component, but also a skeletal component. One of the frequently used methods in the treatment of skeletal open bite in adult patients is the technique of orthodontics and orthognathic surgery.

Case: Here we report a oligodontic patient with lateral open-bite who treated with orthodonticssurgery-prosthesis cooperation. A 17-year-old female patient was admitted to our university with the complaint of incorrect bite and dislike the appearance of her teeth. The patient had 1 mm overjet and 7 mm openbite between the right and left posterior molar teeth.Depending on the oligodontism, there is a congenital retardation in three parts of the alveolar bone. Bilateral sagittal split osteotomy was performed in a clockwise rotation of approximately 17 degrees to the mandible. The perpendicular dimensions of the patient were increased with posterior rotation, the jaw tip was reduced, and the posterior openbite was corrected. The guide splint is manufactured in such a way that it provides 1 mm anterior thickness and 2 mm thickness in the posterior part in order to make the previously planned prosthetic restoration after surgery.

Conclusion: After 30 months of orthodontic treatment, Class I molar-canine relationship was obtained. Openbite is closed by mandibular rotation. Oligodontia was corrected by prosthetic restoration. In the light of these results, it was seen that orthognathic surgery was successful in openbite cases and multidisciplinary approach was necessary for treatment efficacy.

Keywords: Oligodontics, Openbite, Orthognatic Surgery



OP-026 A new anchorage technique in rigid external maxillary distraction

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Objective: Maxillary hypoplasia is a common finding in patients with repaired orofacialclefts. Traditionally, this condition is treated by means of a Le Fort 1 osteotomy. Rigid external distraction is currently used to correct severe maxillary hypoplasia. In this presentation, the authors present their technique to distract the hypoplastic cleft maxilla using a rigid external distraction device.

Case: A 23 year-old male patient applied to dentistry faculty with the chief complaint of facial appearance. He had repaired alveolar cleft on the left side and severe maxillary hypoplasia. Under general anesthesia, maxillary down fracture was performed and 4-hole zygomatic anchor plate placed in apertura pyriformis for connection to rigid external distractor bilaterally. After that the routine distraction procedure was performed.

Conclusion: Treatment of repaired orofacialcleft patients is more complex because the amount of advancement tends to be larger and the degree of malocclusion is worse.Long-term results of traditional Le Fort 1 osteotomy in these patients show an increased tendency to relapse after maxillary advancement, especially in cases with severe maxillary deficiency and extensive scarring of the palatal and pharyngeal tissues. Maxillary distraction in cleft lip and palate patients is a relatively new technique to advance the maxilla. It is mostly performed with an externally placed distractor using a frame attached to the cranium for stabilization. The potential benefits of rigid external distraction are unsurpassed three dimensional (3D) control during distraction; the ability to alter the distraction vector during the process; and the avoidance of major resurgery for device removal after the consolidation phase.

Keywords: Rigid External Distraction, Distraction Osteogenesis, Orthognathic Treatment



Orthognathic Surgery From Patient's Perspective

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Objective: Orthognathic surgery is the procedure to correct the skeletal deformities to provide the function and esthetic at the base. In literature, many papers have evaluated the technical side or clinical outcomes of the procedure. It is also important to evaluate the patient's thoughts about the process between presurgical time and the final result. This study aims to determine patient difficulties in their perspective after the orthognathic surgery and the patient opinion about the surgery results.

Materials-Methods: Patients who treated with bimaxillary or single jaw surgery with or without genioplasty between 2012-2018, at Kocaeli University Faculty of Dentistry Maxillofacial Surgery Department, were recalled and they were asked to answer the questionnaire about their orthognathic surgery experience. Patients were asked to reply 25 questions about their postoperative process experience after the surgery and the effects of the operation.

Results: Forty patients (20 female, 20 male, mean age 25.05±5.27) were included in the study. % 37,5 of patients evaluated the process harder than they expected, %37,5 of them evaluated easier than they expected and %25 of them evaluated they experienced the same as they expected. %72.5 of them would definitely accept the same treatment with current experience.

Conclusion: Even though there was a rough period after the surgery, a large majority of the patients would accept this treatment modality with their current experience, and this result infers patients think surgery worths it.

Keywords: orthognathic surgery, patient-based outcome, skeletal malocclusion



Evaluate The Morphological Changes on Nasopalatine Structure with Cone Beam Computed Tomography After Sarme Procedure

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Objective: The maxillary incisive canal is an important structure in diagnosis, preoperative planning, and prosthetic preparation The Surgical Assisted Rapid Maxillary Expansion (SARME) may be an indication on the maxillary transverse deficiency. The aim of this study to evaluate the morphological changes occurring in the length of incisive foramen diameter (IFD), mediolateral transverse of incisive foramen (MTIF) and incisive canal length (ICL) in patients undergoing SARME with Cone Beam Computed Tomography (CBCT).

Materials-Methods: For all patients, CBCT data were obtained before the treatment, and 3 months after the operation. Preoperative and postoperative CBCT images were analyzed in sagittal and axial sections. Preoperative and postoperative changes in the length of IFD, MTIF, and ICL were compared on the CBCT.Results divided into groups according to gender (Male, Female) differences

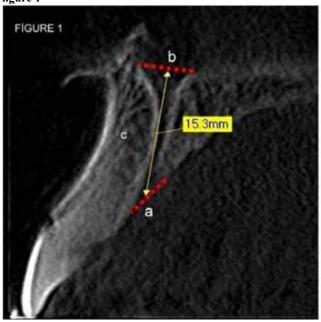
Results: As a result of this study, it is determined that postoperative IFD, MTIF, ICL values were significantly different compared to preoperative values. (p < 0.05)

Conclusion: Incisive foramen and incisive canal changes can occur after SARME. For this reason, those possible changes should be kept in mind before surgical planning, diagnostic definitions, and prosthetic guidance.

Keywords: Cone Beam Computerize Tomography, Nasopalatine Canal, Sarme

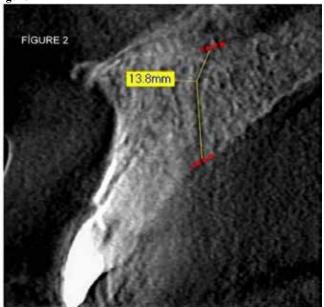


figure 1



The sagittal section shows the measurements of the length of the nasopalatine canal and the anteroposterior diameter of the canal at the nasal fossa, mid-level, and hard palate. Measurements of the incisive foramen, nasopalatine foramen and incisive canal length on sagittal section CBCT; a) The diameter of the incisive foramen., b) the diameter of the nasopalatine foramen, c) The length of the nasopalatine canal

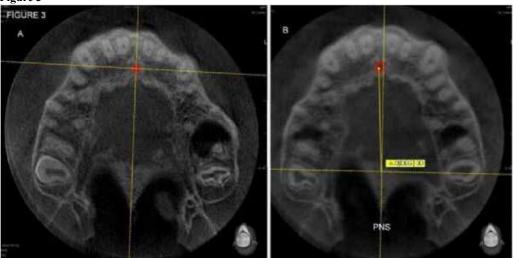
figure 2



An axial section at the level of the incisive fossa shows the mediolateral diameter of the incisive fossa. Measurement of the length of the angled incisive canal on sagittal section CBCT.







The amount of incisive foramen displacement was calculated by measuring the angle of the linear line drawn by the spinal nasalis posteriorly from the center of the incisive foramen.a) Preoperative CBCT view of the linear angle incisive foramen's center makes with PNS b) CBCT view that shows postoperative transposition of incisive foramen

ICL (Table 3)

ICL (Preoperative)	N 30	Mean 12,7	Median 12,5	Min. 11,2	Max. 14,6	Wilcoxon Sign Test	Wilcoxon Sign Test	Wilcoxon Sign Test
		,,	,-	,-	,.			Р
						Sd	Z	*0,0001
						1,0	Z	
							-4,8	
ICL	30	13,2	13,0	11,8	15,2	1,1	Z	Р
(Postoperative)							-4,8	*0,0001

The change of ICL compareted with Wilcoxon Sign Test (*p<0.05)

MTIF (Table 2)

							Wilcoxon T Test	Wilcoxon T Test
Deviation Right	N 8	Mean 1,9	Median 2	Min. 1,1	Max. 3	Sd 0,664	Ζ	P
							-0,105	*0,200
Left	5	1,8	1,9	1,6	2	0,622	-0,105	*0,200
Non	17	1,2	1,1	0,4	2,5	0,612	-0,257	0,024
Comparison with MTIF Wilcoxon T-test (* $p < 0.05$)								

IFD (Table 1)

IFD (Preoperative)	N 30	Mean 3,6	Median 3,7	Min. 2,0	Max. 4,5	Sd 0,5	Wilcoxon Sign Test	Wilcoxon Sign Test
	50	5,0	5,1	2,0	ч,5	0,5	Ζ	Р
							-4,2	*0,0001
IFD (Postoperative)	30	4,1	4,0	2,5	5,4	0,6	-4,2	
								*0,0001
								(* p <0.05)

Preoperative and Postoperative Comparisons of Incisive Foramen Diameter with Wilcoxon Sign Test



Is the current staging system of medication related osteonecrosis of the jaw (MRONJ) is appropriate for diagnosis and clinical follow-up? An offer for new MRONJ staging system: A retrospective single center cohort study

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Objective: MRONJ has become one of the most common bone pathologies in oral and maxillofacial surgery with its increasing incidence since 2003. However, there are still lots of controversies about its treatment options and the currently used AAOMS staging system. The aim of this study is to investigate the changes in the course of the disease with surgical and conservative treatment in patients with clinical follow-up with based on clinical records and CBCT images.

Materials-Methods: We designed and implanted a retrospective cohort study. Enrolled sample of patients diagnosed with MRONJ between 2014 to 2018 and followed up with CBCT images. While evaluating the clinical findings, a scoring system with seven sub-classes from K0 to K6 was used. Radiographic findings were evaluated by using with composite radiographic index (CRI) between 0 to 12. Statistically linear mixed modelling was used and statistical significance was defined as p < 0.5.

Results: A total of 102 CBCT's in 28 patients were evaluated. The mean follow-up period was 17.25 ± 10.7 months. Patients with excessive periosteal reaction had poor prognosis. Patients had sequestrum without additional lytic changes show complete healing after the surgery. The clinical status at the time of surgery has a great impact on the surgery's outcome.

Conclusion: The current AAOMS' staging system does not include radiological findings such as periosteal reaction and sequestrum, which contain important signs about the prognosis of MRONJ. We offered a new staging system based on CRI scoring and clinical status.

Keywords: MRONJ, BRONJ, radiographic findings, prognosis



Effect of systemic oxytocin application on new bone formation and distraction rate on rabbit mandible: first results

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Objective: In recent years; oxytocin has been reported to affect the differentiation of mesenchymal stem cells and has direct anabolic effects on bone mass. The aim of this study was to investigate the application of systemic oxytocin to the bone healing and distraction rate in distraction osteogenesis.

Materials-Methods: The study was performed using 28 male white New Zealand rabbits. Group A, 1 mm/day distraction and 4ml intramuscular salin for 10 days after the postoperative fifth day. Group B, 2 mm/day distraction, 4ml intramuscular salin for 10 days after the postoperative fifth day. Group C consisted of animals with 1 mm / day distraction, 10 μ IU / kg intramuscular oxytocin for 10 days after the postoperative day 5. Group D consisted of animals with 2 mm / day distraction, 10 μ IU / kg intramuscular oxytocin for 10 days after the postoperative day 5. After 45 days postoperatively, animals were sacrificed and samples were sent for micro-CT analysis.

Results: In micro-CT analysis, significant increase in bone volume in distraction gap was determined in C group compared to other groups. Group D which is 2 mm/day distraction applied have bone volume almost the same Group A.

Conclusion: In our study, it was shown that systemic oxytocin administration may increase bone healing and distraction rate in distraction osteogenesis on rabbit mandibles.

Keywords: oxytocin, distraction osteogenesis, bone healing



Investigation of the Effect of Low Level Laser Therapy on Implant Osseointegration in Implant-Supported Mandibular Overdenture Cases

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Objective: The aim of this study was to investigate the effectiveness of Low Level Laser Therapy (LLLT) on osseointegration of dental implants in implant-supported mandibular overdentures.

Materials-Methods: 21 patients were included in this study. 42 titanium implants with same diameter and same lengths were implanted on right and left mandibular canine tooth areas. Implants on the right side of the mandible received laser therapy. InGaAsP semiconductor diode laser (BIOLASE Epic 10,Inc., Irvine,CA, USA) with a wavelength of 940 nm was used. The LLLT was applied to four points (buccal, lingual, mesial and distal) on the area of the implant placement. Each application point received total 800 seconds as will be 200 seconds per point on the operation day and 3., 7., 14. and 30. days postoperatively. The stability of these implants were measured using Periotest®. The mean Periotest values were recorded at the time of operation and post-operative 3., 7., 14., 30. and 90. days. The patients were followed for 1 year.

Results: The mean Periotest values of post-operative 1.day of the right and left implants were consistent. During the osseointegration, the Periotest values in the laser group showed a significant increase compared to the control group. The Periotest values of the 30. days (P=0.036) and 90. days (P<0.001) in the laser group increased statistically significantly.

Conclusion: LLLT application to dental implants placed in the jawbones stimulates biological tissues, accelerates bone healing and improves secondary stability of implants.

Keywords: Dental implants, LLLT, mandible, osseointegration, overdenture



Evaluation of Perioperative Medical Intervention Related to Orthognatic Surgery

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Background: The aim of this study is to investigate the effect of the type of surgery on the difficulty and duration of surgery and to determine whether these procedures cause anesthesia-related complications such as difficulty on intubation or blood transfusion.

Materials-Methods: A total of 202 patients who were operated under general anesthesia with indication of orthognathic surgery from 2014 to 2018 in Başkent University Oral and Maxillofacial Surgery Department were evaluated retrospectively. The prevalence of skeletal deformities, all orthognatic surgery procedures, intra operative complications due to surgery, intubation difficulty, blood transfusion requirement during surgery or post operative intensive care and additional medication requirements due to operation time and difficulty were recorded and were descriptively analysed.

Results: Out of 202,114 patients aged between 17-40 were included in the study. The patients divided into two groups according their surgical operations as single jaw(n:41) and double jaw(n:73). 97 patients have skeletal class 3 deformity and 17 patients have skeletal class 2 deformity. In 4 patients, bad split was occurred during operation while 8 patients had other procedures and operation time was prolonged. 4 patients received erythrocyte suspension because of decreased haemoglobin value. 4 patients had difficult intubation. Also, one patient was followed up in the intensive care unit because of acute pulmonary edema.

Conclusion: Life-threatening complications may be seen even after oral and maxillofacial surgery. Anesthesiologist should be aware of the skeletal deformity related difficulties during the intubation while oral and maxillofacial surgeon should be aware of the possible complications risks of prolonged and difficult surgery.

Keywords: orthognatic surgery, complications, anesthesiology



Comparing the Ideal and Real Beauty Arch after Le Fort I osteotomy without malar augmentation

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Objective: The midface is one of the most important parameter in aesthetic beauty of the face. The aim of this study was to evaluate the dimensional changes in the malar region after maxillary advancement, without malar augmentation following Le Fort I osteotomy.

Materials-Methods: This retrospective study includes 36 (13 male, 23 female) consecutive subjects with midfacial hypoplasia who underwent Le Fort I osteotomy. Standardized preoperative and 6 months postoperative photographs of the lateral view of patients in natural head position were evaluated by using Powerpoint and Image J programs. All photos were standardized by measuring the tragus-lateral cantus distance. The distance between the most prominent point of the real beauty arch (RBA) and the patients individual ideal beauty arch (IBA) was determined by the same software.

Results: The subjects beauty arch showed significant improvement at the post-operative 6th month(p<0.05). The RBA's of the 15 subjects became close to the IBA but didn>t match it completely, 3 subjects showed exact matches with the IBA and the other 18 subjects> RBA was beyond their IBA limit. Although the difference between IBA and RBA was not significant(p>0.05).

Conclusion: Improvement in the malar region is expected following Le Fort I surgery. The decision for malar augmentation should be considered based on the patients' desires and the surgeons surgery prediction. A preoperative set up, and if possible 3D planning is necessary to reach the ideal midface aesthetic. The RBA matched either exactly or slightly behind or beyond IBA in all patients included in this study.

Keywords: Le Fort I, midfacial hypoplasia, malar augmentation, beauty arch



Preemptive Analgesic Effect of Intravenous and Oral Ibuprofen in Mandibular Third Molar Surgery: A Prospective, Randomized, Double-Blind Clinical Trial

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Objective: The purpose of this study is to describe the preemptive analgesic effect of oral and intravenous(IV) ibuprofen in mandibular third molar surgery.

Materials-Methods: 125 patients were randomly divided into 5 groups; Group 1 received IV ibuprofen 60 minutes before surgery; group 2 received IV ibuprofen 60 minutes after surgery; group 3 received oral ibuprofen 60 minutes before surgery; group 4 received oral ibuprofen 60 minutes after surgery; group 5 received intravenous placebo (100 cc Saline) 60 min before and after surgery. Postoperative pain was recorded on a visual analogue scale (VAS) at 1, 2, 4, 6, 8, 12 and 24 h postoperative period. The total dose of rescue paracetamol intake was recorded during first 24 h of the postoperative period.

Results: The efficacy of post-surgical analgesia was the most greatest in preemptive IV ibuprofen group when compared to the other groups (p<0.001). The placebo group was received more rescue analgesia within the first hour than others. The avarage dose of paracetamol taken in group 1 was 640 mg, while it was 1840 mg in placebo groups in 24 h (p<0.001).

Conclusion: In this study, preemptive use of IV ibuprofen significantly decreases postoperative pain and rescue analgesia requirement intake during the first 24h after surgery.

Keywords: Third molar surgery, pain, analgesic, preemptive analgesia, ibuprofen



Management of Odontogenic Fibromyxoma in the Mandible with TMJ Prosthesis designed in 3D: A clinical case report

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Objective: Odontogenic fibromyxoma(OF) is a relatively rare neoplasm and accounts for only 3–8% of all odontogenic tumors and cysts of the jaws. It is a slow growing, painless, locally aggressive tumor seen in gnathic bones and is generally asymptomatic that more conservative surgical procedures are associated with higher probability of recurrence of OF. Despite the fact that resection showed the lowest recurrence rates. In this case report, aimed to discuss the advantages and challenges in the management of the OF in the mandible with resection and the 3-D TMJ prosthesis.

Case: A 41-year-old male patient was presented to our clinic with chief complaint of the pain and swelling of right mandible region. Extra-oral examination revealed a swelling but was no changing on colour,temperature of overlying skin as like as no complain of paresthesia. Intraoral examination showed a firm, non-tender swelling with labial plate expansion extending from right lower over retained deciduous central first premolar to right lower retromolar region and it obliterated the vestibule. OPG showed a large well defined, and multilocular radiolucent lesion with impacted teeth. Incisional biopsy was planned under local anaesthesia, and reported it as an OF after histopathological examination. Hemimandibulectomy was planned under general anaesthesia. We used 3-D designed temporomandibular joint prosthesis for reconstruction.

Conclusion: Infection was observed at the first postoperative month. Antibiotics, washing and drainage was performed. At the end of the second week, the infection disappeared. The infection was thought to be the result of a foreign body reaction. Postoperative control was going on.

Keywords: Odontogenic fibromyxoma, TMJ, 3D prosthesis



Evalution of the Effect of Surgical Rapid Maxillary Expansion on TMJ Disc Position with Magnetic Resonance Imaging

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Surgically assisted rapid maxillary expansion (SARME) is widely used to solve maxillary transversial deficiencies in adults. SARME could change the occlusal morphology. At least studies related orthognatic surgical treatments effects on temporomandibular joint (TMJ) have been done. But there is no study about SARME effects on TMJ morphology. The aim of this study is to evaluate the possible changes on TMJ disc position following SARME.

Material & method: The study included 13 subjects (5 man, 8 woman) with a mean age of 19.5 ± 2.3 years with maxillary transversial discrepeances. The magnetic resonance imaging assessments of the TMJ were done before SARME operation(T1) and different retantion times after expansion process (T2). Disc position of TMJ was evaluated in terms of retention period, gender and presence of wisdom teeth. Data were analysed statistically in SPSS 21(Chicago, Illnois) package programme.

Result: After treatment (T2) there was excess changing position seen in three articular disc relative the condyle in three patient. But there was no significant difference seen statistically in values of TMJ DPIs in mouth opened or closed position in terms of retention time, gender and presence of wisdom teeth (p> 0.05).

Discussion and Conclusion: Functional changes and amount of retantion time and bite and muscle force is important for any morphological differantion. Thus may be in another study researchers can examine muscle and bruxism activites with different radiologic methods. In conclusion, SARME is neither a risk factor nor aprevention for Temporomandibular disorders but large sample studies are required.

Keywords: Surgically assisted rapid maxillary expansion, Temporomandibular Joint, Magnetic Resonance Imaging



CBCT Evaluation of the Relation of TMJ Morphology and Condylar Position in Patients with Internal Derangement

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Objective: In this prospective study, the relationship between internal derangement (ID) and structural morphological features of the temporomandibular joint (TMJ) is evaluated. The study aimed to determine analysis of joint morphology and the anteroposterior position of the condyle in the mandibular fossa, in the control and patient groups.

Materials-Methods: CBCT images of 106 temporomandibular joints of 53 patients (46 females and 7 males) with ID, which was confirmed by magnetic resonance imaging scans, were evaluated. Angular and linear measurements in glenoid fossa and articular eminence were recorded. The parameters were calculated using InVivo 5 Software (Anatomage, San Jose, CA). The relationship between each parameter and ID was investigated and evaluated for a correlation between these parameters for the control and patient groups. The paired t-test was utilized to compare these parameters between control and patient groups.

Results: The results of the present study confirm any significant differences in the values of articular slope and condyle height / glenoid fossa depth ratio among the 2 groups (P value >0.05). There is no apparent relationship between these parameters and gender in the patients with ID.

Conclusion: The joint spaces and associated with ratios were related to the ID. It is suggested that the condylar position and articular eminence inclination may be affected by ID.

Keywords: TMJ, internal derangement, articular slope. condyle, glenoid fossa



Clinical Outcomes of Auriculotemporal Nerve Block in TMJ Dysfunction

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Objective: Majority of temporomandibular joint (TMJ) dysfunctions arise from TMJ disorders. (i.e. arthralgia, internal disorders, condyle fractures, congenital growth disturbances) TMJ dysfunctions are one of the most misdiagnosed or inaccurately treated diseases in medical practice. These dysfunctions are not life-threating conditions but severely impacting individual's life quality. We aim to present case series in which patients were diagnosed with TMJ dysfunction and treated with auriculotemporal nerve block(ANB) to relieve pain intensity so, to establish TMJ functions in normal ranges.

Case: Patients who had referred to our clinic with TMJ dysfunction symptoms and were diagnosed by DC/TMD diagnostic criteria, treated with pharmacotherapy conjugated with occlusal splint therapy, seven female, three male patients were included. Despite applied therapies, patient's symptoms were worsened, but patients refused surgical interventions. Thus, ANB was administered three times a week in every other day routine to relieve symptoms. Pain level alterations were followed with Visual Analogue Scale. Before ANB administration mean VAS score was 8.2, mean unrestrained mouth opening measurement was 32.2mm. After completion of the treatment course, three follow up visits were planned postoperatively. According to, last follow up outcomes mean VAS score decreased to 2.1 and mean unrestrained mouth opening increased to 41.7mm.

Conclusion: According to the outcomes, ANB can be used as an alternative therapy in patients with painful TMJ dysfunction who cannot obtain satisfactory outcomes with noninvasive modalities and who are unwilling to advanced invasive procedures. With this alternative treatment, TMJ dysfunction symptoms can be prevented, and thus TMJ disorders can be intercepted.

Keywords: Auriculotemporal Nerve Block, Local Anesthesia, Mouth Opening, Pain, Temporomandibular Joint Dysfunctions



Evaluating the Changes of Temporomandibular Joint Caused by Prolotherapy in an Experimental Animal Model

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 $\label{eq:constraint} \textbf{Objective:} In this study evaluation of the changes due to dextrose injection in temporomandibular joint was aimed.$

Materials-Methods: Right joints of seven rabbits was injected with % 10 dextrose while right joints of the other seven rabbits was injected with % 20 dextrose as prolotherapy in order to compare the effects of different concentrations of dextrose on temporomandibular joint capsules. Isotonic NaCl solution was injected in the same amount of dextrose solution to contralateral joint of each animal as to compare the changes developed in the capsule caused by prolotherapy. Injections were performed once a week for 4 weeks. Animals were killed six weeks after the first injection was carried out and bilateral temporomandibular joint of each animal was evaluated histopathologically.

Results: The inflammation and fibrosis scores were statistically higher in the capsules of right joints in the first group that were injected with % 10 dextrose and in the second group that were injected with % 20 dextrose compared to the contralateral left joints of each group that were injected with saline solution as controls.

Conclusion: In conclusion, the injection of hypertonic dextrose solution caused no harm to joint structures and reduced the fibrosis in comparision to saline injection. More comprehensive experimental and clinical studies evaluating parameters such as cytokines, cell proliferation apoptosis markers, collagen diameter and length on this subject are needed to support these findings.

Keywords: Dextrose, Dislocations, Fibrosis, Joint instability, Temporomandibular joint



Intra-oral open reduction of the medically dislocated peadiatric condylar head fractures. Report of 2 cases

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Background: Conservative and closed treatments for peadiatric mandibular condylar fractures are almost standard treatment. Open treatment is seldom or rare. Medially dislocated condylar fractures with reduction of mandibular ramus hight has tendency to develop tempormandibular joint ankylosis. We propose intraoral open reduction to restore anatomy and physiology of the injured peadiatric mandibular condyles.

Objective: Present 2 cases of medially dislocated condylar heads on peadiatric patients (5 and 10 years old) treated by intra-oral open reduction then elastic traction.

Cases: 2 peadiatric patients sustained sever mandibular condylar injuries. Both condyalr heads were completely outside the fossa and the mandibular ramus on close approximate to the zygomatic arch. Through vestibular ramus incision the condyalr heads reduced and pushed lateral to the mandibular ramus. This was followed by elastic traction using interdental wiring (arch bars and resdon cable) and physiotherapy for 3 weeks. Both patients showed good recovery and restoration of normal function. Post OP images (including cone beam CT) showed good condylar remodeling and articulation within the glenoid fossa.

Conclusion: open reduction through intraoral approach for the dislocated condylar head might be considered to restore normal mandibular function and to prevent traumatic TMJ ankylosis. Long term follow up is needed to confirm this good short term outcomes.

Keywords: Peadiatric mandibular condylar dislocation., Open reduction., Intraoral approach



Intraoral reduction of prolonged mandibular dislocation through coronoidectomy/coronoidotomy

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Background: Prolonged mandibular dislocation is difficult to treat. Many surgical techniques have been described for the treatment of prolonged mandibular dislocation. Traction using bone hooks applied at angle of the mandible or at the sigmoid notch, different mandibular osteotomies such as midline mandibulotomy, bilateral sagittal split osteotomy, vertical ramus osteotomy, condylectomy with or without lateral pterygoid myotomy, combined condylectomy, coronoidectomy with suprahyoid myotomy and bilateral eminectomy have been all reported.

Objective: To present our experience with 3 cases of prolonged mandibular dislocation managed by intraoral reduction after performing coronoidotomy or cornodectomy.

Case: We are reporting 3 cases of prolonged mandibular dislocation which had been left untreated for more than 3 months. The dislocated mandibular condyles were directly manipulated and reduced through an intra-oral open reduction approach after performing coronoidectomy or coronoidotomy. All cases had successful reduction and has been followed for at least 6 months.

Conclusion: Intra oral coronoidectomy or coronoidotomy allowed approaching the condyles directly and applying posterior-inferior force opposing the direction of dislocation, preserving remaining joint structure, allowing post-operative direct function, and avoiding complications of extra oral approaches. It has logical mechanism of action with favorable and successful outcome which had not been reported in literature previously.

Keywords: Prolonged mandibular dislocation, Intraoral reduction, coronoidotomy, Coronoidectomy



Tenosynovial Giant Cell Tumor of Infratemporal Fossa excised through combined Trans mandibular and endoscopic approach

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Tenosynovial Giant Cell Tumor is a benign soft-tissue neoplasm that rarely occur in the craniofacial region. This paper report a case of a 27-year-old male patient presented to our unit in September 2017 with severe temporomandibular joint (TMJ) pain and progressive limitation in mouth opening. Based on clinical and imaging examinations, a well-defined soft tissue lesion was identified within the right infratemporal fossa causing pressure to TMJ and surrounding structures. The lesion was surgically excised intoto through transmandibular and endoscopic approach. Histopathology revealed a rare tenosynovial giant cell tumor. A six months follow-up of the patient showed good functional and esthetic outcomes with good mouth opening and resolution of jaw pain.

Keywords: Temporomandibular Joint, Tendon Sheath, Tenosynovial Giant Cell Tumor, transmandibular approach, endoscopic surgery



OP-043 Noonan Syndrome and 3 Years Follow-Up

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Noonan Syndrome(NS) is an autosomal dominant, variably expressed, a multisystem disorder with an estimated prevalence of 1 in 1000-2500. Most affected individuals have characteristic facial features that evolve with age; a broad, webbed neck, short stature, feeding difficulties, sternal deformity, pubertal delay, cryptorchidism, etc. Frequently, ectopic unerupted teeth are involved by lesions. Here we report a case who is diagnosed with NS with various outcomes in the oral and maxillofacial region such as multilocular radiolucencies in total mandible but its condylar processes. She also revealed expansions in her mandibular angle regions which have been suspected as Cherubism previously. Because of her failure to thrive and pubertal delay, the patient was consulted to the Department of Orthodontics for her misalignment. During her follow-ups, she got an infection on her left retromolar region which was treated with antibiotherapy only and healing was uneventful. Radiographic evaluations showed better calcification process in radiolucent areas during her treatment. Oral and maxillofacial symptoms of NS is not discussed in the literature because of its highly rare to encounter. However, this is the first case report that gives information and insights for an NS patient whose prognosis is followed-up clinically and radiologically for 3 years.

Keywords: Noonan syndrome, cherubism, mandibular expansion



The Evaluation Of Serum C-Terminal Telopeptide Value For The Risk Of Medication Related Osteonecrosis Of The Jaws

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Objective: Medication related osteonecrosis of the jaws (MRONJ) is a condition complicated and there are various treatment protocols which can only be applied after necrosis has occured. The aim of this study was to evaluate the serum C-Terminal Telopeptide (CTX) levels of bisphosphonate (Bp) treated patients before and after the treatment.

Materials-Methods: The patients will treated with Bp by endocrinology and oncology department were included to the study. After written concent form given, blood samples were obtained before and six months after Bp treatment.All samples were cantrifugated and CTX values were determined by Elisa test. Clinical and radiological examinations were performed and dental treatments were completed.Data was analysed and p<0,05 was found statistically significant

Results: 32 oncology and 58 endocrinology patients were included in pre-treatment CTX value of the oncology patients this study. The mean pg/ml and 705,95 360,45 pg/ml in endocrine patients was (p<0,001). 37,7 % of all patients (n=34) had only CTX values six months after Bp treatment and mean pre-treatment CTX value was 539,09 pg/ml and 241,03 pg/ml after Bp treatment and the difference was significant (p<0,001).

Conclusion: Serum CTX is a prognostic marker for determination of the risk of MRONJ. As a result of this study, pre-treatment CTX value of oncology patients was higher and decreased more after Bp treatment. It is concluded that, the risk of MRONJ in patients treated with Bp especially in oncology patients, can reduced with regular check of CTX values and completion of all dental procedures before Bp treatment

Keywords: Bisphosphonate, Mronj, Osteonecrosis, Ctx



Conservative treatment of an ameloblastoma by marsupialization with a favourable response: A case report

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Objective: Ameloblastoma is a benign tumour of odontogenic epitelium which is slow growing, locally invasive, expansive that may result with asymmetries of the face. Conservative treatment of odontogenic tumours with marsupialization is not common but can be done successfully in those with cystic pattern. The aim of this case is to propose marsupialization as an initial procedure for its treatment.

Case: We have present a case of an ameloblastoma involving 56 -years –old male patient. Ortopantomography and computed tomography showed the lesion extended between right molar region and left molar region of mandible with both buccal and lingual expansion and root resorbtions. On clinical examination expansions of mandible and slight tooth mobilities was seen. An incisional biopsy was carried out and histopathologic examination revealed ameloblastoma although clinical features of lesion were more suggestive of cyst. Our case was treated by obturator marsupialization with a good healing.

Conclusion: This case discusses the available treatment option according to macroscopic features of jaw lesions and emphasizes on the importance of the most conservative treatment option. Conservative treatment preserves integrity of bones while radical treatment can leave major cosmetic and functional sequelae such as pathologic fractures, complication with reconstruction plates.

Keywords: ameloblastoma, cystic ameloblastoma, marsupialization



Pathologic Fracture of the Mandible in a Multiple Myeloma Patient

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Objective: The aim of this to present pathologic fracture of the mandibular angle caused by a multiple myeloma lesion.

Case: A 58 year old female patient admitted to the outpatient clinic with complaint of pain in the left mandibular molar region. Intraoral examination revealed an edentulous area with swelling and pain on palpation. Radiographic examination with orthopantomograph revealed a radiolucent lesion with well defined borders which was in relationship with an impacted third molar. Initial diagnosis of dentigerous cyst was made and incisional biopsy was scheduled. During biopsy excessive bleeding was encountered. Histopathological examination result was multiple myeloma. Patient was examined in more detail and the lesions were also encountered in the scalp and cervical vertebraes. Patient was consulted to oncology and chemotherapy was started. During chemotherapy pathologic fractures of the mandible and vertebrae.The vertebral fracture was the first-in-line treatment decision, stabilisation of the fracture was done after chemotherapy finalized. Patient started zoledronic acid treatment. Because of the medical condition and prescribed medication patient is currently being followed.

Conclusion: Lesions of the oral region may indicate systemic conditions and must be diagnosed carefully for higher success rates and better prognosis.

Keywords: Multiple Myeloma, Pathologic Fracture, Zoledronic Acid, Biphosphonate



Figure-1

Initial view of the lesion.





View of the pathological fracture.

Figure-3



View of the fracture on 6 month follow-up.



Hemimandibulectomy Due To Huge Odontogenic Myxoma By Preserving İnferior Alveolar Nerve: A Case Report

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Objective: Odontogenic myxomas are benign neoplasms of the jaws, they are manifesting with painless swelling and locally invasive. Odontogenic myxomas mostly detected incidentally during radiographic examination. They may reach considerable sizes and cause cortical expansion of bone. Wide lesion is treated with marginal or segmental resection.

Case: A 65 years old male patient reported to the Department of Oral and Maxillofacial Surgery, with gradually increasing swelling of right mandible region. For the definitive diagnosis an incisional biopsy was made from there. And the lesion was compatible with odontogenic myxoma. While the surgery, inferior alveolar nerve was preserved and the right hemimandibulectomy was performed. Reconstruction plate was applied from the right premolar to left mandibular angular region.

Conclusion: Odontogenic myxoma being locally invasive, aggressive tumour with a high recurrence. So resection is an effective method for treating these kind of lesions but nerve damage is one of the most important complication. For patient comfort and avoiding any nerve disturbance, during the surgery, inferior alveolar nerve can be dissected carefully.

Keywords: myxoma, hemimandibulectomy, inferior alveolar nerve



Conservative Treatment of Large Volume Odontogenic Cysts with Decompression: Case Series

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Objective: Pathological formations with liquid or semi-liquid material surrounded by epithelium are called cysts. Cysts that develop from the epithelium of the structures of the teeth are called odontogenic cysts (OC).OC are generally slow to grow and expand. They usually develop asymptomatic unless they are infected, and they are coincidentally detected on the radiograph.Diagnosis of OC is performed according to different clinical and radiological features, and histopathological examination is essential for definitive diagnosis. In this case series, conservative treatment with decompression and subsequent enucleation of odontogenic cysts reaching large volumes is presented.

Case: Four patients aged 17 to 39 years presented with a painful swelling that was infected in the mandible.Patients who applied to Inonu University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery, were asked to use CT to determine the lesion boundaries. It was learned that the lesions were benign odontogenic cysts after incisional biopsy. The tube was then placed in the lesion area for decompression. Cysts shrinking at an average of 6 months follow-up were enucleated. No recurrence was observed in the follow-up of patients and their follow-up was ongoing.

Conclusion: Odontogenic cysts can be treated by enucleation or post-decompression. Enucleation of lesions that have reached large sizes brings surgical difficulties. Decompression reduces the pressure in the cyst and reduces the size of the cyst. Reduced cysts move away from important anatomical formations and enucleations become easier. In this case series, large volume odontogenic cysts were treated conservatively with decompression followed by enucleation.

Keywords: conservative treatment, decompression, odontogenic cyst



Low Grade Mucoepidermoid Carcinoma and Glandular **Odontojenic Cyst: Comparison of Two Cases**

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Objective: Intraosseous mucoepidermoid carcinoma(IMC) is not common, only 2-4% of them be detected in the jaw. Glandular odontogenic cyst(GOC) is a rare entity with a prevelance of 0.012-0.03% among all jaw cysts. GOC has an also aggressive growth potential. It is hard to distinguish GOC and IMC from each other according to their similar histological and clinical properties.

Case: GOC and IMC were detected in a 39 year-old and in a 57 year-old patient, respectively. However in GOC case first diagnosis of biopsy was only odontogenic cyst. The lesion was marsupialized for 1 year. According to unsatisfactory healing biopsy results were reavulated in an external clinic and the evidence was suggestive of GOC. Partial resection was performed. Other patient was also treated with partial resection in addition to neck dissection.

Conclusion: In order to avoid inappropriate treatment, it is recommended that these two conditions should be examined very carefully especially by oral pathologists

Keywords: Intraosseous mucoepidermoid carcinoma, glandular odontogenic cyst, oral pathology



Figure 1

Intraoral view of mucoepidermoid carcinoma







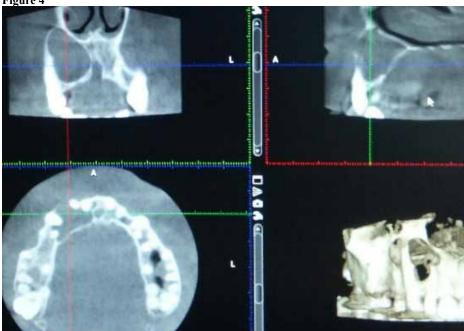
Intraoral view of glandular odontojenic tumour



Intraosseous mucoepidermoid carcinoma, Tomographic view



Figure 4



Glandular odontogenic cyst, Tomographic view



OP-050 The Effect of Modified High Lefort 1 Osteotomy in Mid-**Face Deficiency**

Nazife Begüm Karan, Çiğdem Köşe Department of Oral&Maxillofacial Surgery, RTE University, Rize, Turkey

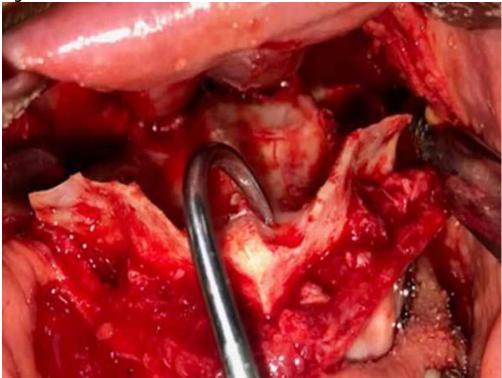
Objective: Orthognathic surgery procedures are performed to correct skeletal deformities. The aim of this study is to indicate the effect of osteotomy technique in soft tissue profile.

Case: A skeletal class III, 25 year-old patient with mid-face deficiency underwent doublejaw surgery with a maxillary impaction and mandibular repositioning. A modified high Le Fort I osteotomy was preferred for the soft tissue impact. (Fig. 1, 2) Skeletal discrepancy was corrected, facial esthetic was achieved. Concave mid-face profile due to zygomatico-orbital deficiency was turned into a convex profile with prominent cheeks bilaterally. Recessed nasolabial folds were filled. Negative over jet was corrected, class I occlusal relationship was achieved intraorally.(Fig.3)

Conclusion: Modified high Le Fort I osteotomy is a reliable procedure to correct skeletal malocclusions in the presence of mid-face deficiencies. Thus, when extra advancement around the cheek area is required, it can be preferred to improve the results of surgical interventions.

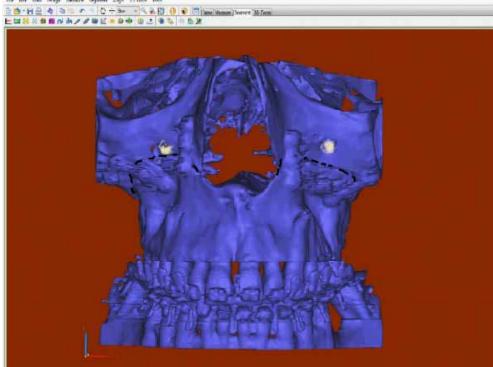
Keywords: Orthognathic surgery, modified high Le Fort I osteotomy, zygomatico-orbital, midface deficiency





Intraoral view of high Le Fort I osteotomy





Postoperative 3D image. Black lines indicates the osteotomy line. Yellow area indicates the infraorbital foramen.

Figure 3



Comparison of preoperative and postoperative soft tissue changes (mid-facial soft tissue improvement)



Evaluation of Posterior Airway Space after Setback Surgery by Simulation

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Objective: The possible negative outcomes of mandibular setback surgery (MSS) on the upper airway (UA) have become an important issue in recent years. The purpose of the present study was to compare the different amounts of MSS and to confirm the accepted maximum amount of mandibular setback by using Computational Fluid Dynamics (CFD) method.

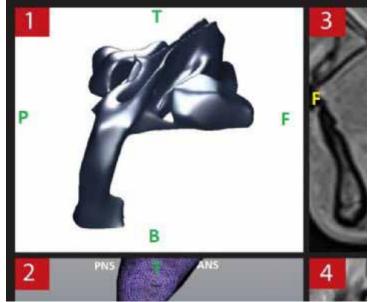
Materials-Methods: An anatomically similar UA model was constructed from magnetic resonance images of a systemically healthy individual. Two out of 6 models were kept as control models and the remaining 4 models were created to represent MSS scenarios with different amounts to correct Class III skeletal abnormality. The airflow was assumed laminar, incompressible and the surrounding soft tissue was assumed to be linear elastic.

Results: The sixth model that was representative of 15 mm of MSS was showed statistically significant differences from the other models (p<0.05). No significant differences were observed among other models in terms of the all parameters (p>0.05).

Conclusion: CFD has been recently used in researches by modeling the UA flow; however, to the best of our knowledge, none of the studies have proved the maximum limits of MSS amounts with this technique.

Keywords: mandibular setback, upper airway, finite element method, computational fluid dynamics

1)3D geometric model 2)3D meshed geometric model. 3)The most affected sites of UA from orthognathic surgery on sagittal section. 4)The most affected sites of UA from orthognathic surgery on coronal section.



A = A plane, B = B plane, C = C plane, a = a axis. b = b axis. F = Facial. P = Posterior. T = Top. B = Bottom. ANS = Anterior nasal spine. PNS = Posterior nasal spine. U = Uvula. NPW = Narrowest posterior wall. BoT = Base of tongue. PPW = Posterior pharyngeal wall. RPW = Right pharyngeal wall. LPW = Left pharyngeal wall. APW = Anterior pharyngeal wall. R = Right. L = Left.



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Tukey's post-hoc comparison. Displacement at airflow, velocity, pressure, von Mises stress results.

J	1 1	
	MODEL	Mean±SD
Displacements at airflow	Model 1	0.02 ± 0.012
	Model 2	$0.01{\pm}0.005$
	Model 3	0.03 ± 0.020
	Model 4	0.03 ± 0.022
	Model 5	0.03±0.023
	Model 6*	0.20±0.131
Velocity	Model 1	750.46±487.094
	Model 2	555.09±360.306
	Model 3	1077.53±699.397
	Model 4	1060.88±688.593
	Model 5	1072.99±696.451
	Model 6*	2070.00±1343.582
Pressure	Model 1	0.42 ± 0.297
	Model 2	0.22±0.157
	Model 3	$0.99 {\pm} 0.702$
	Model 4	1.17 ± 0.774
	Model 5	1.18±0.793
	Model 6*	5.45 ± 3.550
Von Mises stress	Model 1	6.12±3.862
	Model 2	2.08 ± 1.286
	Model 3	12.90±8.259
	Model 4	13.68±8.747
	Model 5	14.50±9.293
	Model 6*	71.53±45.137

* p<0.05, Statistically different. SD, Standard deviation.



OP-053 Bad Split During Bilateral Sagittal Split Osteotomy of Mandible: Case Report Series

Timuçin Baykul, Yavuz Fındık, Gülperi Koçer, Mehmet Fatih Şentürk, Tayfun Yazıcı, <u>Seçil Duygu Sümengen</u> Oral and Maxillofacial Surgery Department, Faculty of Dentistry, Suleyman Demirel University, Isparta

Objective: The bilateral sagittal split osteotomy (BSSO) is one of the most common procedures in orthognathic surgery. Since it was first described by Trauner and Obwegeser, efforts to reduce associated complications have led to several modifications. Despite these improvements, operative complications still occur and include nerve injury, bleeding, and mechanical problems such as irregular split patterns. One of the operative complications during BSSO is a bad split, which describes an unfavorable or irregular facture of the mandible in the course of the BSSO. The purpose of this presentation is to review retrospectively the incidence of bad split in our clinic. A few illustrative cases are also presented.

Case: We examined the patiens who underwent BSSO at Faculty of Dentistry, Suleyman Demirel University between 2014 and 2019. A total of 102 BSSOs of the mandible 6 bad splits occured.

Conclusion: The BSSO is an extremely technical and sensitive procedure, and careful attention will probably prevent most unfavorable splits. If a fracture occurs, the fractured segments should be incorporated into the fixation scheme if possible. The occurrence of bad splits cannot always be avoided.

Keywords: Bad Split, Bilateral Sagittal Split Osteotomy, Orthognatic Surgery



The Effect of Low Level Laser Therapy on Paresthesia Recovery After Implant Surgery

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Objective: The treatment for paresthesia associated with implant surgery, is primarily based on the use of drugs and implant removal, which may not be completely effective. There have been many claims for the therapeutic effects of low level laser (LLL) therapy such as acceleration of wound healing, pain attenuation, restoration of neural function following injury and modulation of the immune system. The aim of this study was to evaluate the effects of LLL therapy on paresthesia associated with implant surgery in the posterior mandible.

Materials-Methods: Eleven patients with paresthesia after implant surgery were included in the study. The remaining patients received 10 sessions of LLL therapy two times a week for 5 weeks period. Before each session, all patients were asked to mark 0-10 on Visual Analogue Scale, 0 refers to no paresthesia and 10 refers to the maximum paresthesia after the surgery. They were also subjected to clinical neurosensory tests such as pinch test, two points dicrimination test, pointed blunt test and cold test to evaluate objective and subjective variations in paresthesia.

Results: Paresthesia was 100% recovered in 7 of 11 patients. The rate of recovery of paresthesia in total was 91.8%. The implants which were closely associated with the mandibular canal, were replaced in two patients. While there was no significant difference in pointed blunt and thermal test results, 2-point discrimination and pinc test showed a significant differences after 5 week LLL session.

Conclusion: In conclusion, the LLL therapy has the potential to improve neurosensory recovery in patients with inferior alveolar nerve paresthesia.

Keywords: dental implant, paresthesia, low level laser



Do implants closed with healing cap show less marginal bone loss after 1 year?

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Objective: Early peri-implant crestal bone loss during the healing period and the first year on function, often greater than the bone loss occurring in following years, is generally observed regardless of the implant type. Several factors affecting marginal bone loss have been described over the years. The aim of this study was to compare the amount of first year peri-implant bone loss between implants with cover screw and primary closure and implants closed with healing cap.

Materials-Methods: Patients with bone level tapered implants included and divided into two groups. In group I, after implant placement healing cap was placed on the implants while in group II, cover screw was placed before primary closure with sutures. Panoramic radiographs, taken before and after the implant surgery and after 1 year follow up, were used in bone loss evaluations. Peri-implant bone loss measurements were performed digitally in computer assisted software programme.

Results: Thirty implants included in the study with fourteen implants in healing cap group and sixteen implants in the cover screw group. After the first year follow up, mean 0.7014 mm marginal bone loss was observed in the healing cap group whereas in group II mean 1.3156 mm marginal bone loss was measured. This 0.6142 mm difference between two group was found statistically significant.

Conclusion: Placing healing cap instead of cover screws on implants may prevent the periosteal tissue pressure on the crestal bone and reduce the amount of marginal peri-implant bone loss which is commonly seen in the first year period.

Keywords: dental implant, marginal bone loss, bone resorption



Evaluation of The Effect of Different Types of Osteotomies on The Primary Stability of The Implant in Closed-Type Sinus Lifting Technique

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Objective: Closed Sinus lift technique is routine an augmentation methods for inadequate bone to place implant in maxillary molar area. Different types of osteotomy instruments use for closed lift technique. In this study, we aimed to evaluate the efficacy of different types of osteotomy instruments on primary implant stability for closed sinus lifting technique.

Materials-Methods: Twenty pieces fresh cow ribs that were processed to simulate closed sinus lifting procedure were prepared at a height of 5 mm. The ribs were divided into two main groups (n: 10). For bone height from 5 mm to 8 mm, two different types of osteotomy (convex edge and concave edge) were applied. Cylindrical type 3,75 x 8mm length implant was inserted into the prepared socket and implant stability measurements were performed by using resonance frequency analysis.

Results: According to the implant stability quotient (ISQ) values of the placed implants, no significance was detected between the stability values of the 2 different types of osteotomy instruments (P, 0.01).

Conclusion: Within the limitations of this in vitro study, different types of osteotomy instruments, which have convex edge and concave edge may not influence primary stability of the implant for closed sinus lift technique.

Keywords: osteotomy, sinus lifting, primary stability, implant



Open Barrier Membrane Technique with Expanded Polytetrafluoroethylene in Bone Augmentation

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Objective: The aim of this study was to present vertical bone augmentation with expanded polytetrafluoroethylene (e-PTFE) by using open barrier membrane technique in 18 years old female patient before implant placement and to review the literature.

Case: 18 years old female patient without any systemic diseases referred to Van Yuzuncu Yil University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. Vertical bone deficiency was augmented with autogenous bone graft harvested from symphysis and microporous e-PTFE membrane was placed with open barrier membrane technique. The literature review was performed by searching Pubmed and Google scholar databases. e-PTFE membrane was removed 3 months later and it was observed that the gingival tissue was regenerated underneath e-PTFE membrane and covered the augmented area without infection. In this study, open barrier membrane technique was used with microporous e-PTFE membrane and secondary soft tissue healing was obtained. There were not any similar study in the literature.

Conclusion: The e-PTFE membrane can be used for soft tissue regeneration in vertical bone augmentation without primary closure.

Keywords: e-PTFE membrane, bone augmentation, open membrane technique



An Evaluation of the Correlation between the Eruption Angle of Mandibular Third Molars and the Occurrence of Periodontal Bone Loss in Second Molars

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Objective: Due to their position in the arch or eruption angle, mandibular third molars can cause numerous pathological conditions such as tooth decay, periodontal bone loss, and root resorption in the neighboring teeth. Our study aims to evaluate the correlation between the eruption angle of mandibular third molars and the rate of periodontal bone loss in second molars.

Materials-Methods: 200 patients were included in the study. Mandibular third molars were classified according to their angles and eruption levels based on panoramic films. The level of periodontal bone loss was measured and recorded according to probing depth.

Results: 105 female (52.50%) and 95 male (47.50%) patients were included in the study. Mandibular third molars that are classified as mesioangular 1 according to the Winter and Pell-Gregory classification were seen to cause maximum periodontal bone loss (a total of 274 mm bone loss in 46 second molars), while mandibular third molars that are classified as distoangular 1 and 3 were seen to cause minimum periodontal bone loss (a total of 8.3 mm bone loss in 3 second molars).

Conclusion: Many studies have been conducted evaluating the correlation between the eruption angle of mandibular third molars and the pathological conditions they cause. These teeth are known to cause tooth decay, periodontal bone loss, or root resorption in the neighboring teeth. As seen from the results of countless studies, including the findings of our own study, prophylactical extraction of mandibular third molars can prevent the occurrence of many pathological conditions.

Keywords: Mandibular third molar, bone loss, periodontal bone loss



Evaluation of the effectiveness of the mineralized plasmatic matrix and tricalcium phosphate graft application after mandibular impacted third molar surgery in terms of periodontal and osseous healing distal to the second molar

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Objective: The aim of this study is to compare the effectiveness of mineralized plasmatic matrix (MPM) and β -tricalcium phosphate (β -TCP) with the control group against the periodontal damage occurring in the distal aspect of the second molar tooth after mandibular impacted third molar surgery.

Materials-Methods: 28 patients were included in the study and were divided into three groups as β -TCP(n=10), MPM(n=9) and control(n=9). Cone-beam-computed-tomography was taken preoperatively and bone defect was calculated in the distal aspect of the second molar tooth. Also, the depth of the periodontal pocket was measured in the distal aspect of the second molar tooth. In study groups, β -TCP or MPM graft was placed in the extraction socket and covered with a platelet-rich-fibrin membrane. In the control group, the extraction socket was closed only the primary. Preoperative measurements were repeated at the sixth postoperative month.

Results: In intragroup comparisons it was seen that the depth of the periodontal pocket and bone defect measurements at the distal aspect of the second molar tooth decreased statistically significantly between preoperative and postoperative sixth months in all groups(p<0.05). In the comparison between the groups, there was a significant difference between MPM group and control group(p<0.05). Additionally MPM group was found to be significantly different than β -TCP and control group in the change of intergroup bone defects(p = 0.024, p <0.001).

Conclusion: MPM is easy to apply and is an effective material to protect the periodontal health of the second molar tooth after the operation of the impacted mandibular third molars.

 $\ensuremath{\textit{Keywords:}}$ Mandibular third molar surgery, $\beta\ensuremath{-}\ensuremath{\textit{tricalcium phosphate}}$, Mineralized plasmatic matrix



Pre-operative and Post-operative 3-Dimensional CBCT Evaluation of Anterior Alveolar Bone for Immediate Implantation

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Objective: The objective of this study was to assess the three-dimensional changes in the anterior region of the alveolar bone for immediate implantation by using cone beam computed tomography (CBCT).

Materials-Methods: A total of 30 patients were selected adhering the inclusion and exclusion criteria. Preoperative, postoperative (3-6 months) and late postoperative (1-2 years) CBCTs were taken to measure the thickness of the buccal bone using different reference points. Patients were classified regarding the grafting of extraction socket (by bone chips and membranes if necessary) or only implant placement without grafting. The mucosa was evaluated by the pink esthetic scores (PES), which is consisted of variables mesial papilla, distal papilla, soft tissue level, soft tissue contour, alveolar process deficiency, soft tissue color and texture.

Results: Buccal bone thickness measured preoperatively differed when compared to measurements performed at two different postoperative times. Grafting procedure effected the postoperative bone dimensions.

Conclusion: It can be concluded that bone remodeling occurs after tooth extraction and immediate implant installation.

Keywords: immediate implantation, CBCT, buccal wall, remodalation



A Cross-Sectional Questionnaire Study on Antibiotic Prescribing Habits of Clinicians in Association With Routine Dental Implant Surgery

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Objective: Although various prophylactic systemic antibiotic regimens have been suggested to minimize failure after dental implant placement and postoperative infection, the role of antibiotics in implant dentistry is still controversial. The purpose of this study was to state the present antibiotic prescribing habits of clinicians in association with routine dental implant placement.

Materials-Methods: An electronic survey was sent by electronic mail to all members of the Turkish Dental Society(TDB). The questions asked were related to whether antibiotics were routinely prescribed either pre- or/and postoperatively during routine dental implant placement. In questionnaire, the participiants were asked which antibiotic are they prescribing with its dosage, frequency and the duration In addition to this parameters, clinicians were asked in which special medical conditions they were prescribing antibiotics. The results were analyzed using SPSS software. Descriptive statistics and χ^2 analyses were used.

Results: A total 345 of the members responded to the survey.The mean experience year of the clinicians were 17,13±12,25.Overall,152 of 345(44.1%) sometimes,116(33.6%) always prescribed antibiotics preoperatively;and 60 of 345(17.6%)sometimes, 261(76.8%) always prescribed antibiotics postoperatively during routine dental implant placement. Clinicians prefered mainly prescribing preoperative antibiotics if the patient has some systemic conditions like diabetes mellitus or steroid usage;before performing multi-implant surgery. The most common preoperative regimen used was penicillin group drugs(94.4%,269 of 285). The most common postoperative regimen used was again penicillin group drugs(93.2%,303 of 325).

Conclusions: We found a consensus among clinicians regarding the use of antibiotics in association with routine dental implant placement, that penicillin group drugs are mainly being choosed amoung clinicians and an important portion of these clinicians prefer antibiotics according to the patients' medical conditions.

Keywords: Antibiotics, Preoperative, Postoperative, Implant Surgery, Prophylaxis



OP-062 Retrospective Analysis of 107 Zygomatic Implants for Maxillary Prosthetic Rehabilititation

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Objective: The aim of the study was to evaluate of 107 zygomatic implants (ZIs) for reconstruction of severely atrophied maxilla

Materials-Methods: A retrospective case series study design was carried out that included patients whom placed zygomatic implants under general anesthesia. Inclusion criterias were; all patients were ASA I or ASA II, age >18 years old, inadequate bone for restoration with conventional implants, alternative augmentation procedures considered either inappropriate or contraindicated, no medical condition related to implant failure and patient willing to give valid consent. In present study, ZIs consisted of three different trademarks. Intrasinus and extramaxillary sinus techniques were performed as a surgical approach

Results: The study was composed of 35 patients in whom 107 ZIs were implemented. Patients' average age was 51.6 years (range, 23 to 72 year-old). 3 patients with removable, 18 patients with fixed and 14 patients with hybrid prosthesis were rehabiliated. The overall complication rate was 4.7% and included 2 ZIs of infection (1.8%), 1 ZI of peri-implantitis(0.9%), 1 ZI of sinusitis(0.9%) and 1 ZI of wrong prosthetic rehabilitation(0.9%). The follow-up period was 6 to 36 months

Conclusion: ZIs are successful and crucial option to rehabilitate resorbed maxilla without augmentation org rafting procedures.

Keywords: atrophic, implant, maxilla, zygomatic



OP-063 Peadiatric TMJ ankylosis: Three scenarios and Three approaches

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Background: Peadiatric TMJ ankylosis can lead to significant dysfunction, deformity and obstructive sleep apnea. The early the intervention the less the complexity involved with fewer number of corrective surgeries.

Objective: To present three peadiatric TMJ ankylosis corrected at deferent times with deferent approaches based on the age, deformity and dysfunction.

Cases: First scenario is a 5 years old female presented with unilateral traumatic TMJ ankylosis corrected within one year of the condylar injury. She had no facial asymmetry, no sleep apnea. She was managed by only release of TMJ ankylosis and use of native disc as a normal barrier. One year follow up was unremarkable. Second scenario is a 7 years old male presented with unilateral septic TMJ ankylosis. He presented several years post the ankylosis with facial asymmetry, mandibular retrognathia and sleep apnea. He was managed by mandibular distraction osteogenesis to correct the sleep apnea and the facial asymmetry. This was followed by release of left TMJ ankylosis and reconstruction with costochodnral graft. 2 years post OP follow up was unremarkable. Third scenario is a 16 years old male with unilateral TMJ fibrous ankylosis, sever mandibular retrognathia, maxillary cant and sever sleep apnea. He was managed by intraoral coronoidectomy to improve jaw mobility and mandibular distraction osteogenesis to I, prove asymmetry and OSA. He is awaiting jaw corrective surgery to improve the residual dentofacial deformity.

Conclusion: The approach for Management of peadiatric TMJ ankylosis is tailored based on age, deformity,dysfunctions and type of TMJ ankylosis.

Keywords: Peadiatric TMJ ankylosis, mandibular distraction osteogenesis, costochondral graft



Bilateral elongation of coronoid process: An extraordinary case of extraarticular ankylosis

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Objective: Bilateral coronoid process hyperplasia is a rare condition defined as an abnormal elongation of the mandibular coronoid process. The etiology and pathogenesis of coronoid hyperplasia are unclear. The aim of this presentation is to report a clinical case who is mouth-opening limitation with bilateral coronoid hyperplasia

Case: 22-year-old male patient referred to our department with suspicion of limited mouth opening. our clinical examinations, average maximal incisal opening was 13 mm and when the mouth opening was forced, the hard end was seen. after computed tomographic examination, he was diagnosed with bilateral mandibular coronoid hyperplasia. The treatment proposed was a bilateral coronoidectomy by intraoral approach.

Conclusion: after surgery average mouth opening of 31 mm was obtained. Postoperative physiotherapy (stretching exercises) were considered to be essential for the preservation of the increased mouth opening. Commencement of physiotherapy is recommended to begin three days after surgery. We also recommend the use of the Molt mouth gag retractor, a simple manual physiotherapy device. We will expect, the patient>s mouth opening will increase day by day.

Keywords: Coronoid hyperplasia, coronoidectomy, limited mouth opening



Influence of Hyoid Bone Position on Maximum Mouth Opening: 3D Inverse Dynamic Jaw Model Analysis

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Objective: Suprahyoid muscles contribute to mouth opening with lateral pterygoid muscle. Because suprahyoid muscles lay between mandible and hyoid bone, their strength may change due to the change of their length based on hyoid bone position. The aim of this study to evaluate the maximum mouth opening in different hyoid bone positions using 3-dimensional (3D) inverse dynamic model analysis.

Materials-Methods: A symmetrical jaw-opening and jaw-closing movement has been simulated with an inverse 3D model of human masticatory system using AnyBody Modeling System (AnyBody Technology A/S, Aalborg, Denmark). The model contained three rigid bodies; the skull, the mandible and the hyoid bone. The kinematic analysis of the mandible, hyoid bone and skull were determined according to the literature. The jaw opening and jaw closing muscles were simulated Hill-type muscle modelling. The max mouth opening was successed with 100% muscle activation in 1 sec. The hyoid bone position was changed to 8 different positions and evaluated whether the max mouth opening was achieved.

Results: Three modified models with hyoid bone offset achieved max mouth opening with 100% muscle activation. When hyoid bone replace inferiorly, anteriorly-inferiorly and posteriorly-inferiorly, the jaw model can achieve max mouth opening. In other 5 models, the jaw could not reach the max mouth opening.

Conclusion: The position of hyoid bone is likely to affect the amount of mouth opening. Inferior position of hyoid bone has a positive impact on mouth opening.

Keywords: jaw opening, hyoid bone, suprahyoid muscles, inverse dynamic, 3D modeling



A novel approach for tinnitus: Botulinum toxin A injection

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Object: The aim of this study is to explore the possibility of using botulinum toxin A to treat tinnitus symptoms.

Method: Ten units botulinum toxin type A were injected unilaterally into the aponeurosis of tensor veli palatini muscle in 3 patients with transpalatal technique.

Results: All patients reported a subjective decrease in their tinnitus symptoms one week after injection. In addition, one of the patients developed a hypernasal speech with a voice change three days after injection.

Conclusion: For patients who suffer from tinnitus,transpalatal injection is a preferable choice and the results support the assumption that transpalatal botox injection treatment can be an effective way of managing tinnitus but future studies are required to understand pathophysiology and long-tern results for this therapy

Keywords: botox, tinnitus, transpalatal



Temporomandibular Joint Prosthesis Using for the Reconstruction of Four Different Conditions

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Objective: There are several indications for Temporomandibular Joint Replacement (TJR), such as congenital joint deformity, a history of tumour-related joint resection, ankylosis or re-ankylosis, failed post-traumatic osteosynthesis, degenerative diseases and idiopathic resorption. The aim of this report is to present four cases that were required temporomandibular joint (TMJ) prosthesis and to evaluate functional and esthetic results of the treatments

Case: Four patients who underwent surgical implantation of temporomandibular joint (TMJ) prosthesis were included in this series. Bilateral TMJ prosthesis were placed to 2 patients. One of those patients had condylary degeneration due to rheumatoid arthritis. The other indications were bilateral TMJ ankylosis, traumatic deformation of condyle and resection of condyle to treat recurrent keratocyst. The follow-up periods differed from 6 months to 6 years. Maximum interincisal opening (MIO) showed significant improvement at 3 patients. MIO increased to 20 mm at the patient who had ankylosis previously. However re-ankylosis was seen due to the fact that he did not make the exercises precisely. Infection was seen in one patient 3 weeks after surgery, however recovery was seen following drainage and antibiotic usage.

Conclusion: As a consequence; postoperative infection was able to treat by simple drainage and antimicrobial treatment. Maintenance of MIO within the normal range was not achieved due to the fact that patient did not have enough compliance with physical exercise program.

Keywords: TMJ replacement, custom-made prosthesis, stock prosthesis



Evaluation of Oxidative Stress and Inflammation Markers in Serum and Saliva of The Patients With Temporomandibular Disorders

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Objective: The aim of this study was to compare salivary and serum oxidative stress and inflammation marker levels of individuals with Temporomandibular Disorders(TMD) and healthy subjects, and to assess the effect of these markers on this disease.

Materials-Methods: The study consisted of 27 TMD patients and 17 healthy controls.Prior to any treatment, serum and saliva samples were taken from the patients and centrifuged, and stored at -80°C until analyzed.All samples were examined for IL-6, MDA and 8-OHdG concentrations.The difference between the two groups was evaluated statistically.

Results: There was no significant difference between the median values of 8-OHdG, IL-6 and MDA in both groups(p> 0.05). When the relationship between serum and salivary 8-OHdG, IL-6 and MDA levels in all subjects was evaluated, there was a strong positive correlation between the levels of 8-OHDG and IL-6 in the serum(r = 0.752, p < 0.001). In study group, when the relationship between pain levels and serum and saliva 8-OHdG, IL-6 and MDA levels was assessed, a positive and strong correlation was found between the levels of 8-OHDG and IL-6 in serum.

Conclusion: In patients with TMD, inflammatory and oxidative stress markers were not different from healthy individuals. These results suggest that inflammation and oxidative stress are confined within the capsule and don't affect systemic circulation. Serum and salivary free radicals and inflammation markers may vary from person to person as they are influenced by many different factors. Therefore, oxidative changes in serum and saliva doesn't seem to influence the pathogenesis of TMDs.

Keywords: Temporomandibular Disorders, Oxidative stress, Inflammation



Evaluation of The Gap Volume Following Temporomandibular Joint Ankylosis Surgery: A Preliminary Study

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Objective: Surgical treatment options for TMJ ankylosis are condylectomy, gap arthroplasty, interpositional arthroplasty, and total joint replacement. The aim of this retrospective study is to evaluate the volume of remaining interosseous space in patients who underwent 'Gap Arthroplasty' for releasing the ankylosis of TMJ.

Materials-Methods: 10 patients (7 F, 3 M) aged between 9-62 years(mean age 26.8) diagnosed with partial or complete TMJ ankylosis via CBCT were included in this retrospective study. Preoperative and post-operative (min 3 months, mean:16.2) follow up CBCT scans were obtained from institutional diagnostic image database. 3D volumetric measurement of the gap was evaluated in postoperative CBCT images using Mimics Innovation Suite Software. All measurements were calculated by the same examiner.

Results: Radiographic evaluation revealed that none of the patients had reankylosis and there was no need for second surgery.

Conclusion: Although reconstructive procedures may provide superior functional and esthetic results, gap arthroplasty still remains as a satisfactory and less expensive method of choice for the treatment of TMJ ankylosis patients, showing favourable outcomes in terms of management of mandibular hypomobility, limitation in mouth opening, difficulty in speech and nutrition, airway complications.

Keywords: TMJ, ankylosis, Gap arthroplasty, condylectomy, temporomandibular joint



Low condylectomy for the management of asymmetrical facial deformities secondary to condylar hyperplasia

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Objective: To assess the effectiveness of low condylectomy followed by occlusal correction through arch bars for the correction of asymmetrical dento-facial deformities secondary to condylar hyperplasia.

Materials-Methods: A total of 13 patients (5 female and 8 male) with condylar hyperplasia (CH type 2 and 3) were treated with low condylectomy through a preauricular approach followed by occlusal correction with arch bars and elastics. Out of these 13 patients, 9 had CH type 2b and 4 had CH type 3. The period of occlusal correction ranged between 4-6 weeks.

Results: All 13 patients had satisfactory correction of the facial asymmetries as assessed through cephaloimetric as well as photographic analysis. 11 patients had adequate occlusal relationship at the end of six weeks, while 2 patients had to undergo orthodontic treatment for this purpose.

Conclusion: Low condylectomy followed by arch bars and elastics is a reliable treatment protocol for the single stage correction of asymmetrical facial deformities caused by condylar hyperplasias.

Keywords: Low condylectomy, asymmetrical facial deformity, condylar hyperplasia



Outcome of Mandibular Distraction Osteogenesis in Omani Paediatric Patients with Severe Upper Airway Obstruction

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Objective: Mandibular Distraction Osteogenesis (MDO) is now widely used for treatment of children suffering isolated and syndromic Pier Robin Sequence (PRS) with upper airway obstruction. This study aims to assess the outcome and complications of MDO in Omani paediatrics PRS patients with severe upper airway obstruction.

Methods: A retrospective cohort study of PRS patients with upper airway obstruction treated with internal MDO at Sultan Qaboos University Hospital and Al-Nahda Hospital, Oman, from January 2008 to May 2018. Data collected included; age, sex, pre-operative airway support, pre-operative airway assessment, pre and post MDO removal weight, airway outcome and surgical complications.

Results: 30 patients (21 males and 9 females) underwent MDO (22 isolated PRS and 8 syndromic PRS). Mean age was 17 months (range 13 days – 10 years). Pre-operatively, 14 patients were tracheostomised, 6 intubated, 1 on CPAP, and 9 had no airway support. All patients except for one underwent full pre-operative airway assessment. Recorded complications were; 3 temporary facial nerve weakness, 4 skin infections, and 1 scar formation. Twenty-six patients were successfully extubated or decanulated (86.7%) and 4 failed cases (2 failed to decanulate and 2 underwent subsequent tracheostomy). Mean weight gain at time of removal of MDO for successful cases was 1.2 kg compared to 400 grams for failed cases. The success rate of MDO was higher in the isolated PRS compared to syndromic PRS (95.5% vs 62.5%).

Conclusion: MDO is a safe intervention with an overall success rate of 86.7% in PRS patients with severe airway obstruction.

Keywords: Pier Robin Sequence, Mandibular Distraction Osteogenesis, complications



Stability of Sagittal Split Osteotomy Fixation System Using Different Screw Dimensions in Correlation to Cortical Bone Thickness. A Finite Element Study

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Aims of the study: To compare the stability of sagittal split osteotomy fixation system using different screw lengths and diameters in correlation to cortical bone thickness.

Materials-Methods: This study used Finite Element Analysis to investigate biomechanical stability of sagittal split osteotomy fixation system using different screw dimensions for three mandibles with different cortical bone thickness. A pre-operative CT scan of a patient's skull was used to develop a half fully dentate mandible computer model. Three mandibles with three cortical bone thickness were duplicated. The cortical bone thickness was 1mm, 2mm, 3mm. A sagittal split osteotomy was performed on the computer model for all mandibles and 5 mm mandibular advancement were applied. Fixation technique was applied using one 4 holes straight titanium plate fixed at biomechanical line of the mandible (Champys) with different screw lengths (3mm, 5mm, 7mm) and different screw diameters (1.5mm, 2mm, 2.3mm). Finite element analysis was used to study the amount of miniplate tension(MPa), fixation displacement(mm) and screw tension(MPa) when occlusal forces were applied up to 300 N on the posterior teeth.

Keywords: Sagittal split, Fixation, Stability, Screw dimensions, cortical bone thickness



Sagittal Split Ramus Osteotomy in the Absence of Cancellous Bone Along the Ascending Ramus

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Objective: The existence of cancellous bone provides guidance for the desired split plane through the osteotomy lines and interruptions between buccal and lingual cortical plates increase the risk of unfavorable fractures during sagittal split ramus osteotomy (SSRO). The aim of this study is to present a rare case of SSRO in the absence of cancellous bone along the ascending ramus and a conservative approach using piezosurgery and bone separators to avoid complications.

Case: A 24-year-old systematically healthy female patient was presented with severe Class III dentoskeletal deformity. No cancellous bone was detected above mandibular angles along the rami in radiological evaluation. Due to the thin ramus, vertical and sagittal osteotomies were performed with ultrasonic bone surgery tips attached to piezosurgery device instead of traditional rotating burs and chisels. Split was accomplished by using a Smith bone separator and inferior border separator afterwards. No intraoperative or postoperative complications such as neurosensory disturbance or bad splits were observed.

Conclusion: Prognathic mandibles are tend to have a thinner ramus with a narrower bone marrow space which increases the risk of complications during and after operation. SSRO in the thin ramus in the absence of bone marrow space is a rare situation requiring precise surgical planning. Clinical and radiological examinations should be carefully performed to evaluate the anatomic structure before operation and technical modifications should be considered for each case to reduce complications.

Keywords: Sagittal Split Ramus Osteotomy, prognathism, mandible, piezosurgery



Mandible-first sequence treatment in bimaxillary orthognathic surgery using 3D printed surgical templates for facial asymmetry

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Objective: Bimaxillary orthognathic surgery has been widely performed to achieve optimal functional and aesthetic outcomes in patients with maxillofacial deformity. Although Le Fort I osteotomy is generally performs before bilateral sagittal split osteotomy (BSSO) in the surgery, in several situations BSSO should be performed first. However, it is very difficult during bimaxillary orthognathic surgery to maintain an accurate centric relation of the condyle and decide the ideal vertical dimension of face. The aim of this study to present the case of a 22-year-old female patient with class III maloclusion and facial asymmetry.

Case: 22-year-old female patient was admitted to our department with class III malocclusion and facial asymmetry. The desired movements were planned in 3D virtual planning on the computer. BSSO was performed with 5 mm rotation from counter-clockwise. After these, 4 mm impaction for right side, 1 mm downward movement in left side of maxilla was performed. Any complication was observed in the postoperative follow-ups of the patient.

Conclusion: The maxillofacial deformities are treated with orthodontics and maxillofacial surgery co-operation. Traditional model surgery is generally used for surgical planning but computer aided virtual planning and printed surgical templates from 3D printers is a good alternative for surgical planning nowadays.

Keywords: Mandible First, Sagittal split, 3D planning, 3D printer



Modified Le Fort I Osteotomy and Genioplasty for Management of Severe Facial Deformity in B-Thalassemia Major Patient

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Objective: This report highlights the surgical management of a complex case of B-thalassemia major with maxillary expansion and jaw deformity.

Case: A 33-year old female patient with B-thalassemia major presented to us with chief complain of gummy smile and poor facial aesthetic. Clinical examination showed generalized expansion of the maxilla with marked bony swelling affecting the left side of maxilla measuring by 5cm x 3cm in diameter. In addition, there was severe dental crowding, increased overjet, excessive showing of maxillary anterior teeth, maxillary cant and mild retrogenia. The case is complicated with type II diabetes mellitus and coagulopathy due to liver hemochromatosis. Patient underwent for modified Le Fort I osteotomy, genioplasty and excision of the maxillary bony expansion under general anaesthesia with fresh frozen plasma coverage. The post-operative period was slightly complicated by tachycardia, mild bleeding, and excessive soft tissue swelling. The final surgical outcome for the patient was satisfactory with stable occlusion, symmetrical facial appearance and good anteroposterior profile. One year follow up showed satisfactory aesthetic and stable results.

Conclusion: Maxillary jaw deformity in B-thalassemia major patients is extremely rare and very challenging surgically. Careful selection, assessment and surgical management are important to avoid complications and to achieve satisfactory result.

Keywords: Beta Thalassemia Major, Le Fort I, Genioplasty



Le Fort I osteotomy with iliac bone grafts and delayed dental implants for the rehabilitation of extremely atrophied maxilla

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Objective: The rehabilitation of atrophic maxilla with the implant is a troublesome case for surgeons. The edentulous jaws show severe alveolar resorption such as flat ridge form, inadequate in height and width or depressed ridge form with reversed intermaxillary relationships and increased intermaxillary distance over time. In this case report, we present the case which rehabilitated with Le Fort I osteotomy and iliac bone graft.

Case: A 46-year-old woman with diabetes mellitus applied to our clinic for rehabilitation of edentulous maxilla and mandible. After a detailed intra-oral and extra-oral examination, we diagnosed severe alveolar bone resorption both of the maxilla and mandible. A vertical and horizontal reduction was observed in the maxilla due to early loss of teeth and increased inter-arch distance with pseudo Class III relationship. Le Fort I osteotomy was indicated for the down fracture procedure with iliac graft. She underwent surgery under general anaesthesia. First, Le Fort I osteotomy was performed with the down fracture. After that iliac graft harvested from medial anterior iliac crest. The maxilla was positioned 6 mm forward and 3 mm downwards and it was reconstructed with grafts vertically and fixed by mini-plates and screws. Whole buccal flap was released for the primary closure. 4 months later, implants were placed in the newly constructed maxilla.

Conclusion: Le Fort I and iliac bone grafts give successful results in the edentulous patient who has excessive resorption pattern with reversed intermaxillary relationships and increased intermaxillary distance.

Keywords: bone grafts, le fort osteotomy, implants



OP-077 Brown Tumors of the Jaw: Experience of Sultan Qaboos University Hospital, Oman

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Objective: Brown tumors (BT) are non-neoplastic lesions caused by an abnormal metabolism of bone with an occurrence rate of <5% in the facial bones. The aim of this study is to analyze BT cases and describe their clinical presentation, aetiology, diagnosis, and clinical management.

Methods: A retrospective analytic study of all BT cases seen at Sultan Qaboos University Hospital, Oman, between January 2007 and January 2019. Data included age, sex, clinical presentation, and diagnosis modalities. Clinical management, complications and outcome were also recorded. Results: A total of 10 cases of BT (3 males and 7 females) were identified. Mean age was 27.9 years (range 14 to 65 yrs.). The aetiological of BT was primary hyperparathyroidism (HPT) in 2 cases, secondary HPT in one case, and tertiary HPT in 7 cases. Site of involvement was the mandible in 4 cases, maxilla in 3 cases and the remaining 3 cases involved multiple facial bones. All patients had raised Parathyroid Hormone and Alkaline Phosphatase. Tissue biopsy was conducted in 7 cases. All patients were planned for parathyroidectomy; 5 underwent parathyroidectomy, 2 refused surgery, one died before surgery, and 2 waiting surgery. In one case the patient had excision of BT because of orbital involvement and in another case the patient had intra-lesional steroid injection to assist resolution of the lesion.

Conclusion: BTs are rare in facial region and mainly occurs as a complication of tertiary HPT. Accurate diagnosis for proper treatment requires the combination of clinical, radiographic, histological and biochemical data interpretation.

Keywords: Brown Tumor, Jaw, Hyperparathyroidism



OP-078 Odontogenic Kearatocyst: A Case Report

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Objective: An odontogenic kearatocyst is a rare and benign but locally aggressive developmental cyst and has been used to call as keratocystic odontogenic tumor. In the latest meeting of The World Health Organization Classification of Odontogenic Lesions, odontogenic kearatocyst has been moved from the neoplastic category back into the cyst category.

Treatment of odontogenic kearatocyst has stirred controversy because of the tumor's aggressive behavior and high recurrence rate. The two common treatments of odontogenic kearatocyst at present are enucleation and decompression. Enucleation followed by application of Carnoy's solution, liquid nitrogen cryotherapy, and radical surgery with resection is one of treatment of odontogenic kearatocyst.

Case: A 57-year-old healthy male was referred to the department of Oral and Maxillofacial Surgery, with swelling on the left of his mandible. In intraoral examination, expansion was observed in the left mandible. In radiographic examination, radiolucent, multiloculer lesion was seen from right premolar region to the left mandibular ramus. In computerized tomography, expantion of mandible and buccal bone destruction were seen. Then aspiration biopsy was performed and cytologic findings were compitable with odontogenic kearatocyst.

Under general anesthesia, the cyst was enuclated meticulously and Carnoy's solution was applied to the related region. Received samples were sent to the pathology labrotory. The result was odontogenic kearatocyst.

Conclusion: After 1 year of radiographic follow-up healing was observed and the patient referred to department of Prostodonty for protethic rehabilitation.

Keywords: aggressive cyst, enucleation, odontogenic kearatocyst



preop and postop orthopantomograph

preop and postop orthopantomograph



preop and postop orthopantomograph



preop and postop orthopantomograph



Treatment of Ameloblastomas in Mandible: Report of Three Cases

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Objective: Ameloblastoma is locally aggressive benign odontogenic tumour. It is an asymptomatic, slow-growing tumour characterised by expansion and perforation of cortical bone and soft tissue infiltration. About 80% of ameloblastomas occur in the mandible mainly the third molar region and the remaining 20% in the upper jaw. In this case series, we aim to present treatment of three ameloblastoma cases which were observed in the mandibular premolar-molar regions.

Case: Case 1: A 62-year-old male patient referred to our clinic with swelling and pain symptoms in the premolar-molar region of the right mandible. An incisional biopsy was performed and revealed that the lesion was ameloblastoma. Marginal resection was performed under general anaesthesia. Recurrence was diagnosed on follow-up radiograph of sixth year and reoperated with the same technique.

Case 2: A 47-year-old male patient referred to our clinic with pain symptom in his right mandible premolar-molar region. Histopathological evaluation revealed that the lesion was ameloblastoma. The lesion was enucleated under local anaesthesia. Upon recurrence, marginal resection was performed under general anaesthesia.

Case 3: A 51-year-old male patient presented with the ameloblastoma in the premolar-molar region of the right mandible. Extraorally, the presence of facial asymmetry was observed. The tumour was resected under general anaesthesia. The follow-up period is uneventful.

Conclusion: Although ameloblastoma is a common odontogenic tumour, the treatment of ameloblastoma is controversial. Recurrence of ameloblastoma is a well-known complication after the treatment. Radical options such as resection, reduce the recurrence rates. Long-term follow-up of patients is mandatory in cases of recurrence.

Keywords: ameloblastoma, odontogenic tumor, tumors and cysts of jaw



OP-080 Conservative Management of Large Dentigerous Cysts in Children

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Objective: Dentigerous cysts are benign odontogenic cysts that are associated with the crowns of permanent teeth are rarely seen during childhood. In most cases, they are painless and asymptomatic and usually may be detected by routine radiographs. Two principal surgical methods to treatment of dentigerous cysts are enucleation and decompression. The aim of this presentation is to share our experiences in a case series of children with the dentigerous cysts treated by decompression in order to allow the eruption.

Case Series: Dentigerous cysts enclosing the crown of an unerupted/impacted tooth of 4 children aged 7-11 years were treated with decompression with a tube drain. Clinical, radiologic findings and treatment were evaluated.

Conclusion: Decompression therapy, which aims to eliminate the cystic tissue and protect the permanent teeth in the dentigerous cyst, is very effective in the management of dentigerous cysts during mixed dentition in the childhood.

Keywords: Children, Conservative, Decompression, Dentigerous cyst



Minimally Invasive Management of Intraoral Vascular Malformations: Report of a Case and Literature Review

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Objective: Vascular malformations are frequently encountered in the head and neck region. Although surgery is considered as a valid treatment method for these lesions, it may not always be the most feasible option. In such cases, sclerotherapy is evaluated as the first-line therapy for vascular malformations. Along with an up-to-date review of treatment alternatives, this presentation describes a patient with intraoral vascular malformations which have been managed with polidocanol injections.

Case: A 65 year-old male was referred to our department with a chief complaint of persistent swellings on his lower lip for over 20 years. The clinical examination revealed four soft, purple lesions which blanched during diascopy. None of the lesions presented with thrill, pulse or bruit which clinically helped to omit an arterial malformation. Possible undesirable cosmetic outcomes following surgical excision were discussed due to the extent and location of the lesions and sclerotherapy with polidocanol was initiated. Following a course of three injections over nine weeks, the lesions were visibly diminished.

Conclusion: There are several treatment options for vascular malformations, each with separate advantages and disadvantages. Sclerotherapy is one of these options, for which various sclerosing agents are recommended. Current literature fails to identify the ideal sclerosing agent however studies with polidocanol support its use as a safe and effective therapy.

Keywords: polidocanol, sclerotherapy, vascular malformations



Treatment results of jaw cysts managed by marsupialization or enucleation: A retrospective study

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Objective: Jaw cysts cause bone defects with slowly growing cystic pattern and treated conservatively by marsupialization or radically enucleation. The aim of this study is to evaluate indications for enucleation or marsupialization and comperative effectiveness of treatment results.

Materials-Methods: The study included a total of 29 cases with jaw cyts treated at 2017 and 2018. Demographic data, clinical signs, histopathologic results, treatment modalities, treatment results, size of bony defect before and after treatment, complications and follow up period were analysed retrospectively.

Results: There were 23 male and 4 female patients aged 6 to 63 years (mean, 31,9 years). Patients seperated into three treatment arms. Group I comprised 11 patients treated with enucleation while group II comprised 7 patients who were treated with enucleation and applied PRP(Platelet rich plasma). Group III comprised 8 patients treated with marsupialization. 2 patients were excluded as they have pseudocysts and have not been treated with enucleation or marsupialization. 12 out of 27 patients were radicular cyst, 7 out of 27 patients were diagnosed keratocysts, 7 out of 27 patients were follicular cysts. Reduction in size of radiolucent area on the sixth month follow up compared. Treatment results of three group were similar. All patients show bone healing.

Conclusion: Treatment by enucleation or marsupialization is both successfull for jaw cysts. Providing bone integrity, prevention of tooth loss is easier with marsupialization. Although retrospective nature of this study, standardization of measurement prosedures that was applied to patients included makes results as valuable as prospective one.

Keywords: jaw cyst, enucleation, marsupialization, platelet rich plasma



Central Giant Cell granuloma of the jaw: Is Radical and Chemotoxic treatments are justifiable ?

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Background: wide range of medical and surgical treatments has been suggested in the literature for the management of central giant cell granuloma (CGCG). This reflect the controversy on the nature of the disease. While some consider it reparative or inflammatory, others believe it is a tumor. Endocrine origin has been also suggested.

Objective: To Share our 10 years experience on dealing with this condition and how simple enculation for CGCG can be Curitave.

Method: seven cases of histologicaly diagnosed central giant cell granuloma will be presented. Two cases of maxillary CGCG treated aggressively by subtotal maxillectomy through transfacial approach. Two cases of brown tumor diagnosed through further biochemistry tests. One of them had complete resolution of the jaw lesion after treatment of underling hyperparathyrodism. The other one treated by simple enculation of the maxillary lesion and excision of parathyroid adenoma on the same time. The other 3 agressive mandibular CGCG treated with simple enculation and had complete resolution. All cases had at least 2 years follow up.

Conclusion: Simple enculation for the central giant cell granuloma of the jaw has been found curative in our center. We have shifted from being agressive to conservative. This might question the need for radical or chemotoxic treatments suggested in the literature.

Keywords: Central Giant Cell Granuloma., Simple enculation., Radical treatment



OP-084 Intraoral approach to buccal lipectomy: A case series and reappraisal

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Objective: The past decade has seen the rapid development of minimal invasive procedures in the field of facial cosmetic surgery. In this regard, buccal lipectomy has gained a considerable popularity among patients and surgeons as a safe and simple method of reducing facial roundness and slimming the lower face with a short recovery time. This study aimed to report the outcomes of buccal lipectomy in four patients with different ages.

Case: Four female patients underwent buccal lipectomy via intraoral approach under local anesthesia. A horizontal intraoral incision approximately 1.5 cm in the buccal mucosa of the bite level or in the maxillary gingivobuccal sulcus was performed depending on the location of the fat pat planned to be excised. Following blunt dissection with thin scissors and hemostats thorough the incision, the buccal fat pad was achieved and partially removed. Particular attention was paid to preserve the Stensen's duct during the procedure. No intra- or postoperative complications were observed and all patients were satisfied with the aesthetic outcomes at the end of a 6-months period of follow-up

Conclusion: The proposed approach is a simple and effective procedure for reshaping the mid and lower third of the face in different age groups. Preoperative planning should include individual evaluation of patient expectations and the amount of excessive tissue that can be safely removed. Furthermore, particular attention should be paid in order to prevent unaesthetic appearance related to excessive removal of the fat pad and to preserve critical structures while performing the procedure.

Keywords: bichectomy, buccal lipectomy, buccal fat pad, cheek surgery, facial aesthetics



The Effect of Missing Teeth or Existing Prostheses on Orthodontic Treatment Duration of Skeletal Class III Orthognathic Surgery Patients

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Objective: The factors such as missing tooth or prosthesis affecting the duration of orthodontic treatment time for skeletal Class III orthognathic surgery patients between the time when orthodontic treatment was started and the time when the patients were decided to be ready for the surgery determined retrospectively

Materials-Methods: The effect of the amount of tooth loss or dentures present in the mouth at the beginning of the treatment on the duration of treatment preparation compared to the patient group who has no missing tooth or prosthesis the beginning of treatment.

Results: Shapiro Wilk's tests were used to investigate variables from a normal distribution. One-Way ANOVA test was used for the analysis of the differences between the groups. There was no statistically significant difference between the groups in terms of mean p duration (p > 0.05). The mean duration (11,25 months) for those with/or more than 10 prostheses was shorter than the average of the participants in the other groups. In addition, the mean duration (22.63 months) of the patients with one tooth deficiency was longer than the mean duration of the participants in other groups.

Conclusion: The amount of prosthesis or missing tooth present at the mouth of the patient did not affect the total orthodontic tooth preparation process.

Keywords: orthognathic, Orthodontics, prosthesis, duration

Picture 1



Patient with more than 10 prosthesis ready for surgery anterior

Picture 2



Patient with more than 10 prosthesis ready for surgery buccal: right.





Picture 3



Patient with more than 10 prosthesis ready for surgery buccal: left.



Patient with more than 10 prosthesis ready for surgery upper occlusal

Picture 5



Patient with more than 10 prosthesis ready for surgery lower occlusal

Table 1

	Group	Shapiro-Wick			
		statistics	n	р	
	Control group	,904	15	,111	
Time	1 tooth deficiency	,929	8	,510	
	2 or more missing tooth	,887	7	,258	
	10 or more prosthesis	,986	4	,111 ,510	
	Less than 10 prosthesis	,893	5	,374	
Norma	litv Test				

Table 2

	Group	n	Mean	ss.	Min.	Max	F	р			
Time	Control group	15	17,13	5,11	9	24					
	1 tooth deficiency	8	22,63	9,16	10	36					
	2 or more missing tooth	7	21,29	6,65	12	28	1,84	0,139			
	10 or more prosthesis	4	11,25	7,68	3	21					
	Less than 10 prosthesis	5	19,80	12,11	9	38					
	One Way ANOVA test for comparison of magn times compared to groups										

One-Way ANOVA test for comparison of mean times compared to groups



Management of Thalassemia-Induced Facial Deformity with Bimaxillary Segmental Osteotomies Combined with Dermal Filler: Report of A Case

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Objective: Thalassemia is a genetic disorder caused by mutations affecting hemoglobin synthesis. Along with the varying clinical syndroms, thalassemia patients may present specific craniofacial manifestations including Class 2 malocclusion, maxillary protrusion and severe gingivitis. The purpose of this study was to present the management of an adult β -thalassemia major patient with severe maxillary protrusion.

Case: A 33-year-old female β -thalassemia major patient presented with an excessive premaxillary growth both in sagittal and vertical planes. She presented grossly incompetent lips, complete exposure of maxillary incisors and a severe convex facial profile with a normal TMJ function. Intraoral examination revealed that the teeth number 34, 35, 36 and 46 were missing and fixed prosthetic restorations were present. She underwent orthodontic treatment 3 years ago and dentoalveolar diagnosis included Angle class II division 1 with a overjet of 5 mm. Treatment planning of the patient included segmental maxillary and mandibular setback surgeries and subsequently dermal filler injection to compensate the malar prominence. Anterior maxillary osteotomy was performed with bilateral extraction of first premolars and anterior mandibular osteotomy with extraction of right second premolar. Dermal filler injections and prosthetic rehabilitation were performed following bone healing, and post-operative course was free of any complications or recurrence at 6 month follow-up.

Conclusion: Correction of facial appearance of patients suffering from β -thalassemia major can be better accomplished with combination of soft and hard tissue managements.

Keywords: β-thalassemia major, dermal filler, maxillary protrusion, orthognatic surgery, segmental osteotomy



Lip repositioning as an alternative treatment of gummy smile: A case series

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Objective: Excessive gingival display (EGD) may compromise esthetics during smile. As the etiology is multi-factorial, various treatment options have been described for the management of EGD. The aim of this report was to present the management of four patients with EGD by lip repositioning technique as a minimally invasive treatment modality.

Case: Four female patients referred to our department with a chief complaint of unaesthetic appearance during smiling. Clinical examination revealed EGD as a result of vertical maxillary excess and hypermobile upper lip. Lip repositioning surgery was planned in order to restrict the pull of the elevator lip muscles. After performing two parallel incisions at labial mucosa and mucogingival junction, the epithelium was removed and new mucosal margin was coronally repositioned. The amount of tissue excision varied between 6 to 10 mm depending on the amount of gingival display. No complications or recurrence were observed at 6-month follow-up and all patients were satisfied with the outcomes of the procedure.

Conclusion: As a safe and relatively simple procedure, lip repositioning may provide satisfactory outcomes for patients with excessive gingival display. However, careful examination of the patient and etiology of EGD is mandatory for proper indication and achieving successful results.

Keywords: excessive gingival display, gummy smile, hypermobile lip, lip repositioning, smile esthetics



Investigation of the Effect of Two Different Osteotomy Designs on the Attachment of the Inferior Alveolar Nerve for Sagittal Split Ramus Osteotomy

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Objective: In the During sagittal split ramus osteotomy (SSRO), after the separation of the proximal and distal segments, attachment of inferior alveolar nerve (IAN) to the proximal segment significantly increases the risk of nerve damage and the total operation time.

Materials-Methods: In this study, it was aimed to determine the fracture lines and the regions on mandibular bone where stress was accumulated as a result of the design of two different osteotomies performed by using finite element analysis. While the first designed line of the vertical sagittal component of SSRO is planned to remain at the cortical level, the other designed osteotomy line is planned to pass from cortex to spongious bone as in the classical method. Vertical and horizontal osteotomy lines were defined in accordance with the classical method for both designs. The most beneficial convenient osteotomy design was tried to be predicted determined by predicting which segment IAN would remain in.

Results: FEM results showed that fracture line of the sagittal cut tends to remain more in the cortical borders of the proximal segment of the cortex for the first osteotomy design when compared with the classical method.

Conclusion: Therefore, this design can be more protective in terms of nerve damage but requires a sensitive precise surgery because of the possible risk of bad split.

Keywords: Sagittal Split Ramus Osteotomy, Orthognathic Surgery, Finite Element Analysis



Alveolar Distraction Osteogenesis In Wide Alveolar Cleft Patients

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Objective: Secondary alveolar cleft repair is commonly accepted for alveolar cleft patients, however, nowadays, controversy still remains regarding the surgical technique, the timing of the surgery, and the donor site. Rehabiliton of the large alveolar clefts with autogenous graft or distraction osteogenesis is one of the most common treatment choices. The purpose of the presentation was to evaluate the surgical techniques for repairing the wide alveolar clefts.

Cases: Four patients with alveolar clefts were included in our case series. The width of the cleft was between 15 to 22 mm. All patients were treated with distraction osteogenesis. Segmental osteotomy was performed under general anesthesia. Distraction was started 5 days after surgery. All distracters were bone fixed but supported by a palatal arch for guiding the distraction. Dental cast models were used before the surgery. Pre and postoperative radiological examination was performed by means of orthopantomogram and computed tomography (CT) scan.

Results: With distraction techniques, closure of the alveolar cleft was achieved. The desired movements with new bone formation were attained yet eventful in all cases. Conclusion: The method of treatments described here is a future prospect for treating extremely wide alveolar clefts. Further patients are needed to assess all effects, side effects, risks, and overall benefits of this techniques.

Keywords: alveolar cleft, distraction osteogenesis, wide cleft



Alveolar Cleft Repair with Bone Graft Harvesting from Anterior Iliac Crest: 3 Case Report

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Objective: One of the most common congenital anomalies of head and neck region is the lip and / or the palate. 1 is seen in about 1000 births. The incidence varies depending on some factors such as race, geographic location, ethnicity and gender. Alveolar clefts are accompanied by lip and / or cleft palate anomalies. There are many donor sites used as autogenous bone grafts in the treatment of alveolar cleft. However, the most commonly used donor area, which is accepted as the gold standard, is iliac crest.

Case: The aim of this presentation is to define the treatment of patients who apply to our department. Three patients between 15 and 18 years of age who applied to Inonu University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery with an alveolar cleft, underwent an alveolar cleft repair operation. This presentation describes the procedures applied to these patients. In our study, corticocancellous bone graft from anterior iliac crest was preferred because of the superiority of the autogenous bone and the necessary amount of bone graft in the alveolar cleft repair.

Conclusion: The goals of alveolar cleft treatment are to achieve good results both functionally and aesthetically. Functional treatment goals; closure of oronasal fistulas, ensuring the strength and continuity of the maxillary dental arch, supporting the teeth in the vicinity of the cleft, providing an appropriate ground for tooth penetration in the cleft region. Chronic nasal regurgitation of liquid foods, chronic inflammation of the nasal mucosa, food ingestion of the nasal mucosa and associated social problems may occur in the treatment-resistant oronasal fistulas.

Keywords: alveolar bone grafting, alveolar cleft, autograft



Effects of Lefort 1 Maxillary Impaction On Maxillary Sinus And Nasal Cavity Anatomies: A Three-Dimensional Analysis

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Objective: LeFort 1 osteotomy technique is of benefit to many maxillofacial deformity patients. Airway volume changes after orthognathic surgery with different jaw movements has been evaluated many times before. The purpose of this present study is to evaluate the effect of impaction movement in nasal and maxillary sinus anatomies after LeFort 1 surgery.

Materials-Methods: 16 Patients who underwent LeFort 1 orthognathic surgery were enrolled in the present retrospective study. Three-dimensional cone-beam tomography scans were taken from the all patients 1 week before operations and 8-12 months after operations. 8 patients who underwent LeFort 1 osteotomy with impaction movement were included in Group I. 8 patients who underwent LeFort I surgery without impaction were included in Group II. Alterations in maxillary sinus and nasal mucosal thicknesses, septum angle, maxillary sinus volume, and nasal cavity volume in pre-operative and post-operative tomography scans were determined using MIMICS version 21.0 (Materialise, Belgium) software in all patients. The average alteration values of Group I were compared with that of Group II.

Results: Maxillary sinus volume decrease was observed significant (p <= 0.05) in Group I. Nasal cavity volume decrease was significant (p <= 0.05) in Group I also. Maxillary sinus mucosal thickness values were increased in maxillary rotation patients.

Conclusion: Rare studies about the changes in maxillary sinus and nasal cavity anatomies after LeFort 1 osteotomy point out significant mucosal thickening in maxillary sinuses consistent with the present study. Different than the literature, the effect of impaction movement on maxillary sinus and nasal cavity anatomies were defined in the present study.

Keywords: LeFort nasal, maxillary sinus, changes



OP-092 Survival of Dental Implants Inserted with External Sinus

Lift Procedure

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Purpose: Because of the inadequate crest dimensions or pneumatization of the sinus in maxillary posterior regions, insertion of dental implants became a challenge for the clinician. To overcome these shortcomings external sinus lifting procedure is a valuable alternative. The aim of this study is to explore radiological bony changes after external sinus lift procedure and to evaluate the long-term survival rates of the dental implants inserted with external sinus lift procedure.

Materials-Methods: A total of 30 maxillary posterior implants inserted with external sinus lift procedure were evaluated. Panoramic radiographs of all patients were taken immediately after implant insertion and at 3, 6, 12, and 24 months after operation. The calibrated radiographs were analyzed by a single researcher.

Results: Graft height after sinus lift procedures decreased at 2 years follow-up but the changes were minimal. Only one implant failed and the success rate of dental implants inserted with external sinus lift procedure found to be 97 %.

Conclusion: External sinus lift procedure is proven and reliable technique in the presence of insufficient bone volume in posterior maxilla.

Keywords: Bone formation, graft height, sinus lift



Investigation of the Behavior of Different Titanium Surfaces Against Corrosive Mouth Liquids

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Titanium (Ti) and its alloys have wide range of use in dental implantology owing to its admirable mechanical, physical properties and excellent biocompability. It is currently the most viable option for implants in terms of lower corosion tendency and biocompatibility due to stable and dense titanium oxide layer, biocompatible and corrosion protective oxide layer is sensitive to the excessive use of preventive solutions in dentistry. Corrosive ions such as Fluoride (F) and hydrogen peroxide (H2O2) can be normally found in human mouth. F can be used for avoiding dental caries, plaque formation and one of the ingredients of tooth pastes, mounthrinses and cariostatic gels. The corrosion of dental implants and parts can cause failure of dental implant treatment. The aim of the study was to analyse the effects of different Flor and H2O2 concentrations on different treated Ti surfaces (Electro Polished, Roughed, Fine Roughed, NaTi) by Scanning Electron Microscopy (SEM), and Inductively Coupled Plasma (ICP), with optical emission spectrometer (OES) to provide quantitative bulk elemental composition for Ti samples. Results point to be advisable to use NaTi surfaces with lower ion releasing instead of sandblasted or electropolished Ti surfaces. NaTi coating of surface can be best alternative for protecting Ti surfaces from corrosion.

Keywords: Corrosion, Different Titanium Surfaces, NaTi, Corrosive ions



Peripheral Giant Cell Granuloma Associated with Dental Implants

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Objective: Peripheral giant cell granuloma associated to dental implants is a very infrequent peri-implant soft-tissue complication. The aim of this report is to present a successful clinical and surgical management of peripheral giant cell granuloma associated with dental implants and reviews similar cases published in the English literature.

Case: A 42-year-old female patient presented with a reddish-purple pedunculated mass, of about 2 cm in diameter between two dental implant in the lower jaw. An excision and curettage was performed and the dental implants was removed under the general anaesthesia. Histological examination provided the diagnosis of peripheral giant cell granuloma. There were no complications during surgery or long term follow-up.

Conclusion: Peripheral giant cell granuloma should be removed in order to prevent recurrence and implant failure. However, a limited number of implant-related peripheral giant cell granuloma have been reported in the literature. Therefore, the aetiology and pathogenesis of peripheral giant cell granuloma associated with dental implants is not fully understood. In order to understand the aetiology and pathogenesis of these lesions, it is important to report cases of peripheral giant cell granuloma associated to dental implants.

Keywords: Dental implant, peri-implant reactive lesions, peripheral giant cell granuloma



OP-098 Dental Implants in a Kidney Transplant Patient and Literature Review

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Objective: Patients with renal problems face a lot of oral and dental complications due to immunosuppressive therapy that these patients are submitted to. The aim of this study was to present the implant-supported prosthetic rehabilitation of an almost edentulous patient who has subjected to renal transplantation and to review the literature about dental implants on renal transplant patients.

Case: 51 years old male patient who underwent renal transplantation 10 years ago, admitted to our clinic with complaint of partial edentulism. Due to prosthodontic treatment planning 10 intraosseous dental implants were placed. The literature review was carried out in Pubmed database. The keywords used to explore the resources were as follows: renal transplant, dental implant, osseointegration, immunosuppressant.: During 3 year follow-up period clinical and radiographic examinations revealed peri-implantitis around just one implant. All implants were stable and in fuction with survival rate of %100. It was also worth mentioning that a large amount of bone loss was observed around natural teeth. As a result of clinical and radiographical follow up of the patient and the literature review about dental implants in patients with renal transplant, we concluded that implant therapy is a safe and effective solution for replacement of missing teeth. On the other hand the oral health status of these patients should be reviewed carefully and frequently to prevent any possible peri-implant diseases and other oral problems.

Conclusion: Dental implants to replace missing teeth is a reliable treatment choice for patients with renal transplant.

Keywords: kidney transplant, dental implant, literature review



Evaluation of The Effects of Pre-emptive Intravenous Dexketoprophen Trometamol On Postoperative Pain In Orthognathic Surgery

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Objective: Orthognatic surgery includes invasive, major surgical producer that are frequently performed to correct maxillofacial deformities. Postoperative pain is main complaint after orthognathic surgery. Many methods have been investigated for the management of the postoperative pain. Non-steroidal anti-inflammatory drugs, corticosteroids and opioid analgesics are used to control postoperative pain. Pre-emptive analgesia is a preferred method for managing postoperative pain caused by nociceptive and central stimulation. The aim of this study was to investigate the effects of pre-emptive intravenous dexketoprofen trometamol administration on postoperative pain in orthognathic surgery.

Materials-Methods: This controlled clinical study was designed as a single center, prospective, double-blind, randomized. Thirty patients that included in the study were randomly divided into two groups (n = 30). 50 mg / ml intravenous dexketoprophen trometamol were administrated 30 minutes before incision in patients Group 1 (dexketoprophen trometamol, n = 15) and intravenous sterile saline solution were administrated 30 minutes before incision in patients group 2 (placebo, n = 15). Tramadol with patient controlled analgesia were given for management of postoperative pain. Visual Analog Scale was used to evaluate postoperative pain.

Results: Pre-emptive dexketoprophen administration decreased postoperative tramadol consumption by 26% compared to placebo group, and there was a statistically significant decrease in VAS scores (p<0,05).

Conclusion: Pre-emptive administration of intravenous dexketprophen provide adequate analgesic effect in the postoperative 24-hour period and reduce opioid consumption in orthognathic surgery.

Keywords: Orthognathic surgery, pain, dexketoprophen, pre-emptive analgesia



Characteristics of Supernumerary Teeth and Molecular Genetic Factors Related to the Etiology of These Teeth

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Objective: Supernumerary teeth can be found in the temporary and permanent dentition in anywhere of the oral cavity. The etiology of supernumerary teeth is still unclear but the presence of its is associated with certain genetic syndromes. Moreover heredity is believed to be a major factor and this idea was supported by several researches.

Materials-Methods: This article provides an overview of the proposed hypotheses and examines the current understanding of supernumerary teeth etiology and examines published cases that genetic factors are effective.

Results: Etiology is heterogeneous and highly variable, most of the cases are idiopathic. However it is usually associated with genetic syndromes when present in more numbers. Several causal genes, such as APC, NHS, TRPS1, EVC and RUNX2, have been identified in the literature.

Conclusion: Supernumerary teeth are often asymptomatic and seen during routine examination. However, dentists should be aware of the etiology of these teeth and make a differential diagnosis with known genetic diseases. Also these teeth should be considered for interdisciplinary diagnosis and treatment as well as for family genetic counseling.

Keywords: supernumerary teeth, tooth abnormalities, non syndromic, genetic



OP-101 Surgical Management of Central Giant Cell Granuloma: Case Report

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Objective: Central giant cell granuloma(CGCG) of the jaws is a localized, benign but rarely aggressive osteolytic lesions which is characterized by multinucleated osteoclast like giant cells intermingled with oval to spindle-shaped mononuclear cells. The standard therapies are surgical curettage or resection but more recently other therapeutically options using drugs have also been performed. These drugs include corticosteroid, calcitonin, interferon, monoclonal antibody, bisphosphonates and denosumab.

Case: A 13-year-old male patient was referred to clinic with complaints swelling of the anterior mandible. In clinical and radiological examinations, malocclusion, mobility, root resorption were observed in the lower incisors and cortical destruction. The result of fine needle aspiration biopsy which was performed in a private clinic was CGCG. However, an incisional biopsy was performed because the lesion was expanded aggressively. The diagnose was confirmed as CGCG. Intralesional corticosteroid injection(ILCI) was performed twice as initial therapy in 6 months, but no adequate response was observed. After each session, pubertal growth(PG) was seen firstly and looser and softer nature of mandible followed the PG process, secondly. However, radiolucency near mental foramen was regressed in the radiography, allowing us perform a safer surgery. Surgical curettage and resection of the lesion were performed and the patient was followed periodically.

Conclusion: Recurrence in aggressive lesions may show different prognosis individuals in pubertal age. Although CGCG tends to shows a poor response to ILCI or surgical curettage, a combination of both treatment strategies should be considered in these aggressive cases to reduce radical surgery-related morbidities.

Keywords: Central Giant Cell Granuloma, Intralesional Corticosteroid Injection, Surgical Resection



Diagnosis and Surgical Treatment of Nasal Ectopic Tooth: A Rare Case Report

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Objective: Supernumerary and ectopic teeth are not uncommon and are estimated to occur in up to %1 of the general population. However, teeth arising in the nasal cavity are quite rare. They may present with a variety of symptoms or they may be totally asymptomatic. Radiographic imaging is extremely helpful in making the diagnosis and excluding other conditions that cause similar symptomatology. Treatment involves surgical extraction of this teeth.

Case: A 43-year-old woman presented to the oral and maxillofacial surgery clinic with a history of pain at nasal floor with the reflexion of maxiller anterior teeth. She had no other complaints related to her nose or sinuses. The panoramic radiographic examination of the left nasal base revealed a radiopacity of approximately 8-10 mm. Then, when the CT images were taken, an ectopic tooth with a maximum diameter of 5 mm and a length of approximately 15 mm was detected in the relevant region. The related tooth was surgically extracted after an incision made to the nasal base under general anesthesia.

Conclusion: If the suspected radiopacities seen in the nasal floor in routine panoramic radiographs should be evaluated by taking CT with nasal tooth differential diagnosis.

Keywords: Nasal tooth, computerized tomography, ectopic tooth



Ankyloblepharon-ectodermal dysplasia-clefting (AEC) syndrome with alveolar synechia: A new syndrome?

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Objective: Hay and Wells in 1976 reported seven AEC patients from four families. AEC/Hay Wells syndrome is a rare autosomal dominant disorder characterized by ankyloblepharon, ectodermal dysplasia, and cleft lip and cleft palate. Mutations in the p63 gene recently have been shown to be etiologic in the majority of cases of AEC syndrome. Congenital alveolar synechiae is rarely seen as an isolated disease. It is usually observed together with various syndromes. Our report is a 4 day old baby girl with bilateral soft tissue alveolar fibrous bands (alveolar synechia) and AEC syndrome.

Case: Patient is the first child of the family. She was born at 36 weeks by normal delivery. Parents have consanguineous marriages. They gave history that at the time of birth, her both eyelids were fused partially, which was surgically corrected by an ophthalmologist at one day of age. She also had alveolar synechiae of the upper and lower gums. She had a cleft uvula-palate, her nails and hair were dystrophic. She presented with difficulty feeding because of bilateral soft tissue alveolar fibrous bands. The bilateral alveolar fibrous bands were cut under local anesthesia using surgical knife. The patient>s mouth opening immediately showed improvement and nutrition and jaw development problem was solved.

Conclusion: Congenital alveolar synechiae is rarely seen as an isolated disease. It is generally observed together with various syndromes. The patient should be examined in terms of these clinical symptoms. Only one case with AEC syndrome and alveolar synechia was detected in the literature search.

Keywords: Congenital Alveolar Synechiae, AEC Syndrome, Hay Wells Syndrome



extraoral photograph



intraoral photograph





postoperative photograph



preraoperative photograph





Evaluation of the relationship between bruxism and airway patency in individuals with bruxism

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Objective: Bruxism is involuntary and non functional habbit including teeth grinding or clenching, that can be lead of the hard and soft tissue pathologies of the mouth. Researchers found some differences in respiratory patterns of patients with bruxism. The aim of this study was to evaluate the relationship between bruxism and airway patency in individuals with bruxism.

Materials-Methods: Twenty-five patients with bruxism and 25 healthy subjects were included in the study. The evaluation of airway patency was performed with LEMON method in individuals with bruxism and healthy control group and supported with video laryngoscope. Ten parameters were used to evaluate airway patency. Each criteria is scored as 0 or 1. A value of 0 indicates that the specified parameter indicates the airway clearance; 1 indicates that the same parameter airway closure. The distribution of airway patency in individuals with bruxism was compared with the control group.

Results: The total score of the parameters between bruxism and control group were found statistically different (p < 0.05). When the parameters forming the total score in the bruxism group were examined, the parameters affecting the score were: large incisor teeth, interinsizator opening, mallampati classification (class 1, 2, 3 and 4) was seen.

Conclusion: Airway patency in patients with bruxism tend to be more narrowed than healthy participants.

Keywords: Bruxism, Airway, Sleep, Obstructive sleep apnea syndrome, Upper airway resistance syndrome



OP-106 Efficacy of Botulinum Toxin Type A For Treatment of Myofascial TMD Pain

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Objective: Temporomandibular disorders (TMD) are the most common cause of chronic pain in the orofacial region. The aim of this report to evaluate the role of botulinum toxin type A (BTX-A) in the treatment of pain associated with bruxism.

Materials-Methods: 28 patients were retrospectively included the study who visited Kocaeli University Faculty of Dentistry Oral and Maxillofacial Surgery department. There were 23 female and 5 male patients aged 18 to 58 years. BTX-A was injected into the temporal and masseter muscles. Maximum pain levels (VAS ratings) and jaw range of motion in millimeters (maximum mouth opening, protrusion, right and left laterotrusion) were observed preoperative, postoperative 1 month, 3. month and 6. month follow-up.

Conclusion: Botulinum toxin injections produced significant improvements in pain, function, mouth opening, and tenderness to palpation. Similar to the literature, an increase in MMO and a decrease in visual analog scale (VAS) rate was also observed.

Keywords: Botulinum toxin, bruxism, myofascial TMD pain, temporomandibular disorders



The Effect Of Local Release Alendronate Applied With Bone Grafts In Maxillary Sinus Lifting In Rabbits On New Bone Formation: A Micro-CT Analysis Study

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Objective: The aim of this study is to develop sodium alendronate loaded microspheres shows the local release and to analyse its effects on the new bone formation obtained by simultaneous application of it with deproteinized bovine bone (DBB) grafts in maxillary sinus floor elevation (MSFE) in rabbits using micro computer tomography (micro-CT).

Materials-Methods: This study was carried out in two phases: In the first phase, alendronate loaded poly(lactic-co-glycolic-acid) (PLGA) microspheres was developed and characterized. In the second phase, MSFE procedure was performed on 32 rabbits. Each group included 8 rabbits. In the first group (control group), only DBB graft was applied. In the second group DBB graft and systemic alendronate for 8 weeks (daily 150 μ gr/kg) were applied. In the third group DBB graft and non-formulated local alendronate (1 mg/ml) were applied. In the fourth group, DBB graft and 1 mg local alendronate loaded PLGA microsphere were applied. All participants were sacrificed in the 8th week. Micro-CT analysis was performed to evaluate bone mineral density (BMD) and new bone formation.

Results: In vitro release studies showed that the alendronate loaded PLGA microspheres were released slowly for 14 days. BMD showed a significant increase in local realesed alendronate group compared to control group according to micro-CT results (p=0,007). New bone fraction in micro-CT was found significantly higher in local realesed alendronate group (p=0,241).

Conclusion: The local released alendronate increases bone mineral density and contributed to new bone formation.

Keywords: alendronate, bone mineral density, deproteinized bovine bone, local drug release, maxillary sinus floor elevation



The Effects of PTH (1-34) and SERM (Raloxifene) on Osseointegration of Implants in Osteoporotic Bone

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Objective: The aim of the study is to investigate osseointegration capacity of titanium implants placed in osteoporotic bones by using pth (1-34) and serm (raloxifene) in sequential or in combination.

Materials-Methods: Sixteen New Zealand White rabbits were randomly allocated into 4 groups (each n=10). The first group was the positive control group. The second group was considered negative control group. The third group applying of PTH (1-34) +raloxifene were combined. The last group application of PTH (1-34) and raloxifene were sequential. All groups were subjected to bilateral ovariectomy except of the positive control group. Dental implants were placed in the right tibia of all rabbits 8 weeks after ovariectomy. Animals were sacrificed 12 weeks after the implant placement. Removal torque and ISQ (implant stability test) were performed and the results were analysed.

Results: As a result of removal torque, the mean of the combined group (88.01 ± 8.83 Ncm) was significantly higher than the negative control group (52.11 ± 18.5 Ncm) (p=0.021). Concerning implant stability, the mean ISQ values of sequential and combined groups were significantly higher than the negative control group (p < 0.05). The highest ISQ values were obtained from the combined group.

Conclusion: The results of the study suggest that combined administration of PTH and Raloxifen after dental implant placement is more effective for the achievement of favorable stability and osseointegration in the presence of osteoporosis.

Keywords: Dental implant, Ovariectomy, Osseointegration, PTH (1-34), Raloxifene



Local Anesthesia Knowledge of General Practitioners and Oral and Maxillofacial Surgeons

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Objective: Administration of safe and effective local anesthesia in the limit is an important issue of daily dental and oral and maxillofacial surgery practice. However, the overall knowledge differencies between young and experienced clinicians and the general practitioners and specialists are seen routinely. The aim of this study is to determine levels of the lack of current knowledge about safety performing techniques, administration and dosages of local anesthesia in the daily dental and surgical practice of the clinicians.

Materials-Methods: The survey undertaken at the online platform by using current e-mails of the clinicians who registered to the university hospital of the government and ministry of health dentistry hospitals. Average of 500 clinicians approved and send the questionery and the data collection were evaluated statistically by the authors.

Results: The findings of the survey data were evaluated and indicate that deficiencies in knowledge were identified in all areas assessed.

Conclusion: Courses or life-long educational activities should be designed at both general practitioners and the level of the specialists to address and avoid such gaps and differencies in knowledge. More research is needed on the educational procedures used in the transfer of such knowledge and skills.

Keywords: Local anesthesia, knowledge, dosage, survey



OP-110 Mandibular angulus fracture due to bisphosphonaterelated osteonecrosis

Mehmet Emre Yurttutan, <u>Osman Akıncı</u> Ankara University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery

Objective: Bisphosphonates are non-metabolized analogues of pyrophosphate that are capable of localizing to bone and inhibiting osteoclastic function. However, bisphosphonates have negative effect on bone metabolism. Bisphosphonate-related osteonecrosis of the jaw is osteonecrosis of the jaw in a person with a history of bisphosphonate use who undergoes subsequent dental surgery. It may lead to surgical complication in the form of impaired wound healing following oral and maxillofacial surgery.

Case: 70-year-old female patient with dental pain was admitted to our clinic. In the panoramic view, there were new extraction sockets and sequestration at the mandibular 3rd molar region. Intraorally there was inflammation at the soft tissue around the posterior mandible. According to the medical history, the patient was using bisphosphonate -ibandronic acid- due to osteoporosis for 15 years. The drug was discontinued immediately. The reduction of inflammation was aimed with the use of amoxicillin, metronidazole and chlorhexidine gluconate. 1 month later inflammation did not reduce. In new panoramic view there was angulus fracture. Surgical curettage of the sequestration was performed without delay. Bimaxillary fixation was applied. The fracture healed without problem.

Conclusion: Good medical history should be taken before extraction of the teeth at patients, especially elderly female patients should be questioned whether bisphosphonate was taken or not. As the bone blood supply decreases, the extraction socket cannot heal, it will cause necrosis of the jaw and the patient>s pain increases. And pathological fractures may occur.

Keywords: Bisphosphonate, Mandibular Fracture, Osteonecrosis



OP-111 Sugammadex Experiences in Oral and Maxillofacial Surgery

Ayşe Hande Arpacı, <u>Ozan Kaan Venedik</u>, Erdal Erdem Department of Oral and Maxillofacial Surgery, Ankara University, Ankara, Turkey

Objective: Acetylcholinesterase inhibitors are used to reverse the effects of non-depolarizing musclerelaxantsusedingeneralanesthesia applications. However, these agents have some sideeffects. Continuedeffects after operation of musclerelaxant agents which used in general anesthesia is defined as Post-operative residual curarization(PORC). PORC; causes complications like apnea, atelectasis, hypoxia, pneumonia etc. and increases morbidity, mortality and prolongs hospital stay. PORC due to acetylcholinesterase inhibitors which used to reverse the effectofmusclerelaxant agents is observed. However, PORC not reported after the use of sugammadex. Sugammadex is the first and only selective agent to restore the effect of steroid musclerelaxants and has no sideeffects of acetylcholinesteraseinhibitors. There is not enough data on the use of sugammadex in oral and maxillofacial surgery. In this retrospective study, we aimed to present our experiences with sugammadexfor1yearin patients undergoing oralandmaxillofacialsurgery.

Materials-Methods: We retrospectively examinedfiles and intraoperative anesthesia records of patients who underwent oralandmaxillofacialsurgery under generalanesthesia for one year. Patients age, ASA score, body weight, allergic reaction and presence of intraoperative-postoperative complications, previous anesthesia experiences, the presence of comorbidities and if any diseases were recorded.

Results: The number of patients treated with sugammadex in 1yearperiodwas 66. 20 patients had ASAII, 46 patients had ASAIrisk. Sugammadex was preferred in 38 patients because of being in outpatientgroup, having limited mouthopening in 13patients and more than expected edema due to operation in 15patients. None of the patientswhotreated with sugammadex had allergic reaction, intraoperative and postoperative complications

Conclusion: Oral and maxillofacial operations are the operations that cause us to interfere with the upper respiratorytract and cause the anatomical structures to change and that PORC has the mosteffect on morbidity and mortality. Therefore, wedidn>tfindany sideeffects of sugammadex in this group of patients, mostofwhom were outpatient and had postoperative edema. We provided the discharge of ourpatients withoutanyadverseeffects during the planned time period.

Keywords: anesthesia, Post-operative residual curarization (PORC), suggamadex



OP-112 Retrospective Analysis of Maxillofacial Region Trauma in 30 Patient

<u>Mehmet Emrah Polat</u>, Saim Yanık Harran Üniversitesi Diş Hekimliği Fakültesi Ağız Diş ve Çene Cerrahisi Anabilim Dalı

Objective: The aim of this study is to analyze patients treated for maxillofacial fractures due to trauma retrospectively.

Materials-Methods: The study consisted of thirty patients (Between the ages of 1-48 years (mean age: 20.29), 26 men and 4 women) who were treated for maxillofacial fracture in our clinic between 2016-2018. The etiology, location, treatment methods and complications of 41 fractures due to maxillofacial trauma were evaluated by examining the patient records.

Results: 66.6% of patients had isolated fractures, 33.3% hadmultiple fractures. Falling was the leading cause of maxillofacial fractures (40%); traffic accidents (36.6%) and violence (23.4%) followed respectively. The percent of mandible fractures and maxillary fractures were found tobe 80.4% and 12.1% respectively. In our study, parasymphysis fractures were found to be the first with 36.6% in the distribution of mandibular fractures. The techniques used in the treatments were miniplate, microplate, wire fixation, and arc-bar. Miniplate technique was the most commonly applied (68.2%) thecnique. The mean age of patients undergoing IMF was 14.8, and the open reduction applied patients was 23.1. Facial paralysis was observed on one patient.

Conclusion: Considering the socioeconomic and cultural structure of our region, it has been observed that maxillofacial region traumas are higher in males than in females, and as for etiologic factors falls, traffic accidents and violence are the most important ones. In addition it was observed that the mean age of patients who were treated with IMF was lower than the ones treated with open reduction.

Keywords: Maxillofacial trauma, fracture, treatment



Our Experience with Laryngeal Mask Airway in a Case with Unpredictable Difficult Intubation in Oral and Maxillofacial Surgery

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Objective: Maloclussion and dentofacial deformities of head and neck surgery patients have a high probability of difficult intubation in such surgeries. Here, we aimed to present our anesthetic approach to the patient who applied for cyst excision under general anesthesia.

Case: Cyst excision in the right maxilla anterior was planned under general anesthesia in a male patient with hypertension and arrhythmia. The patient in the ASA II risk group, whose mallapati was II, thyromental distance was 7 cm, sternomental distance was 13.5 cm, was taken to the operation room and midazolam premedication. After anesthesia induction with 2 mg/kg Propofol, 0.6 mg/kg rocuronium, 0.5 mg/kg lidocaine and remifentanil infusion,direct laryngoscopy was performed for nasotracheal intubation, In the absence of appropriate vision, direct laryngoscopy was repeated for orotracheal intubation. The number 4 Laryngeal Mask Airway airway was provided for Cormack-Lehane Class IV patient. The anesthesia was maintained with 50-50% N2O-O2 and 2% Sevoflurane in the patient who did not prevent surgical manipulation because of LMA. After the end of the operation, the LMA was removed in the patient whose anesthetic agents were terminated after the end of the operation and antagonized with sugammadex.

Conclusion: The probability of difficult intubation is 1-4% and the probability of difficult and unforeseen intubation is 0.3-13%. In this presentation, we wanted to emphasize the use of LMA in the management of difficult intubation in head and neck surgeries and in short-term patients who could not perform nasotracheal or oratracheal intubation due to surgical procedure.

Keywords: Difficult Intubation, Laryngeal Mask Airway, Unforseen Intubation



Managing A Rare Life-Threatening Complication During Orthognathic Surgery: Nasotracheal Tube Damage

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Objective: Congenital or acquired deformities of maxilla and mandible are corrected with orthognathic surgery. For facilitating the vizualization and comfort of surgical area, nasotracheal intubation is commonly preferred. The aim of this case report is to discuss the management of the endotracheal tube damage complication during orthognathic surgery.

Case: A 22-year-old male patient was planned a double jaw surgery. After the anesthesia induction, the patient was intubated with suitable nasotracheal shaped tube. Anesthesia was maintained with inhalation anesthetic and oxygen-air mixture. In the first hour of the surgery, air leakage was detected in the anesthesia machine, also an air leakage sound was heard. After detailed controls, it was decided to change the tube to provide the ventilation which had vital importance for the patient. An exchanger cathater was used to change the endotracheal tube as an alternatively method.

Conclusion: Respiratory functions should be contunied during surgeries under general anesthesia. This can be provided by mechanical ventilators via endotracheal tubes and respiratory systems. Any damage to the tube may lead air leakage and disturbs ventilation. If airway safety cannot provided immediately, hypoxic damage and related complications, moreover death may ocur. Unfortunately, if down-fracture of the maxilla has just been done, it is nearly impossible to change the tube with classical methods. So, all airway devices should be prepared in operating rooms and the surgery team should be ready to solve the smilar emergency problems by improving new, practical, effective methods such as exchanger cathater in this case.

Keywords: Complication, exchanger cathater, nasotracheal tube damage



OP-115 Closed Reduction Of The Fractured Arcus Zygoma By A **Hook Traction**

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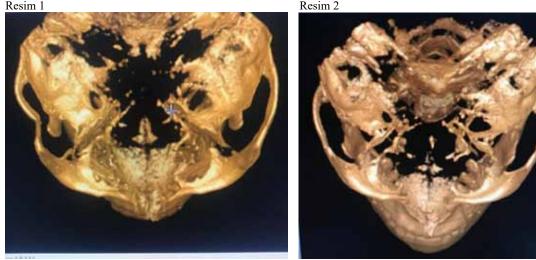
Objective: Among the types of facial fractures, the zygomatic arch corresponds to the second most affected area, after the mandible. Ten percent of all zygomaticomaxillary complex fractures are zygomatic arch fractures only. Direct cutaneous approach, Gillies elevation, and hemicoronal and endoscopic approaches are the treatment options of zygomatic arch fractures. The closed reduction is the first choice in many centers. External traction methods are utilized to fix the simple arch fractures generally in the first 4 days after injury. An effective, easy, cheap and minimal invasive technique for the reduction of an isolated zygomatic arch fracture is presented in this report.

Case: A 37-year old man was referred to our clinic with a depressed area in the right zygomatic region and restricted mouth opening. While the free hand palpates the infra-orbital margin the hook is firmly pulled upward and outward until the fracture is disimpacted. The bone normally returns easily to its original articulation with an audible <click>, confirming the adequacy of the reduction procedure.

Conclusion: Closed reduction and hook traction of simple zygomatic arch is a well-known method. Early stabilization is important to maximize both cosmetic integrity and anatomical functionality. Our technique may be described for the simple, speedy and effective reduction of the large majority of fractures of the malar complex by direct extra-oral application of a traction hook.

Keywords: Hook Traction, Reduction, Zygomatic Arch Fracture

Resim 1





POSTER PRESENTATIONS



PP-001 Treatment of Peripheral Giant Cell Granuloma: A Case Report

Mustafa Cenk Durmuşlar, <u>Hüseyin Gülcan</u>, Evşen Ertem Bülent Ecevit Üniversitesi Diş Hekimliği Fakültesi, Ağız Diş ve Çene Cerrahisi Anabilim Dalı, Zonguldak

Objective: Peripheral giant cell granuloma (PGCG) is a benign reactive lesion of oral cavity and it occurs at any age. The exact etiology is unknown. PGCG occurs in the gingiva and alveolar mucosa. Clinically PGCG may present as a firm or soft nodule as a sessile or pedunculated mass.

Case: 72 years old female patient with a mass in the posteior maxilla referred to Zonguldak Bulent Ecevit University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. Intraoral examination showed that there is a purple mass in the edentulous posterior maxilla with no pain. The radiographic examination revealed bone resorption in this area. Lesion was totally excised. Biopsy was done and histopathological examination showed para keratinized, stratified, and squamous epithelium with a focal area of ulceration. The connective tissue showed dense inflammatory infiltrate predominantly lymphocytes and few plasma cells. The routin radiographs were taken in 1,2 and 3 months after surgery. Oral examination has showed no lesion in this area. Radiographic examination has showed that there is a significant degredation of lesion and incrising of bone radiopacity.

Conclusion: Different factors such as malposition of teeth, plaque and calculus, traumatic extraction, poor dental restorations and food impation are related with PGCG. The main clinical feature of PGCG is a red-purple nodule located in the region of the gums or the alveolar edentulous, mainly in the lower jaw. Treatment is usually by surgical excision and elemination of irritant factors.

Keywords: gingiva, jaw, mass



Complications of Surgical Removal of Third Molars: A Retrospective Study at Sultan Qaboos University Hospital

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Objective: This study was conducted to investigate the complications associated with surgical removal of third molars. Methods: A retrospective study of 337 patients who underwent surgical removal of one or more impacted third molars under general anesthesia at Sultan Qaboos University Hospital, between January 2007 and December 2017. The study variables included; age, gender, indication for removal, teeth removed, and surgical procedure. The outcome variables including intra-operative and post-operative complications were recorded.

Results: A total of 1116 third molars (56% mandibular and 44% maxillary) were removed of which 67.7% were from female patients. The mean age was 24 ± 5 years and 77.7% belonged to the age group of 20-29 years. The overall intra-operative and post-operative complication rates were 4.2% and 8.3%, respectively. The intra-operative complications were root fracture (1.6%), bleeding (0.7%), tuberosity fracture (1.2%), soft tissue injury (0.5%) and adjacent tooth damage (0.2%). The post-operative complications were swelling, pain, trismus (0.6%), dry socket (0.5%) and sensory nerve injuries (7.2%). Nerve injuries were temporary in 41 cases and permanent in 4 cases. A statistically significant relation was observed between age group 30-39 years and dry socket (P=0.01); and bone removal and all the post-operative complications (P=0.001).

Conclusion: This study suggests that most of the complications of third molars removal were minor and within the reported ranges in scientific literature. However, increased age and bone removal were associated with a higher risk of complications. These findings may help in the process of treatment planning, informed consent, and patient education.

Keywords: Third molars, Complications, Nerve injuries



Post-endodontic Mycetoma of Maxillary Sinus: Report of Two Cases

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Objective: Fungal sinusitis is diagnosed when fungal elements are visualized by histopathological examination of material or tissue removed from a sinus. In non-invasive fungal sinusitis, fungal elements are present in mucus material but don't penetrate into antral tissues. Mycetoma or fungal ball is a type of non-invasive fungal sinusitis and the studies have reported that endodontic treatment in maxillary molar teeth is a strong risk factor for mycetoma formation within the maxillary sinus. It's been demonstrated that zinc used in endodontic sealers promotes fungal growth.

Case: Two systemically healthy female patients referred to our clinic, department of Oral and Maxillofacial Surgery of Bülent Ecevit University, at different times with the complaint of nasal blockage and chronic pain on the right side of the face. A foreign body is detected on CBCT with mucosal hyperplasia and maxillary antral congestion on both patients. Caldwell-Luc procedure was planned under local anesthesia to remove the foreign bodies. During the surgery, yellow-brown colored cheese-like material filling the maxillary antrum totally removed from both patients with the foreign bodies, membrane was curetted and maxillary sinus was irrigated with rifamycin. The specimens taken from sinuses were sent to histopathological assessment and the laboratory reports showed that both patients had fungal sinusitis. Healing was uneventful and patients had no symptoms after 3 months.

Conclusion: Fungal ball of the maxillary sinus is the most common fungal disease of the sinuses. The treatment is complete removal of the lesion in immunocompetent patients and recurrence rate is low after total removal.

Keywords: fungal sinusitis, mycetoma, Caldwell-Luc



Giant cell angiofibroma: a rare tumour in the oral cavity

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Objective: To report the clinical, histologic, and immunohistochemical features of Giant Cell Angiofibroma (GCA) arising in one of its extremely rare location.

Case: We report a case of a 26-year-old male with a primary complaint of a painless solitary swelling on the right buccal mucosa, which had been present for about three years. The lesion was surgically excised under local anaesthesia and a diagnosis of giant cell angiofibroma was made on the basis of light microscopy and immunohistochemical studies. Microscopically, it is characterised by circumscribed cellular spindle cells with interspersed staghom vessels, sprinkling of lymphocytes, scattered collections of foamy macrophages and occasional multinucleate giant cells. Immunohistochemically, the neoplastic cells within this tumour were positive for Vimentin, SMA (nuclear and cytoplasmic), CD34 and CD99 but negative for other antigens.

Conclusion: GCA was first described as a distinctive orbital soft-tissue tumour. It is now recognised that this rare mesenchymal tumour can present in other anatomical regions including the oral cavity. At this time, local excision with long-term follow-up seems to be the most appropriate management modality. Dental and Oral & Maxillofacial surgeons need to be aware of the clinical presentation, histological features and management of this rare lesion. To the best of our knowledge, only 4 cases of GCA arising in the oral cavity reported in the literature.

Keywords: Giant cell angiofibroma, immunohistochemistry, oral cavity





Figure 1

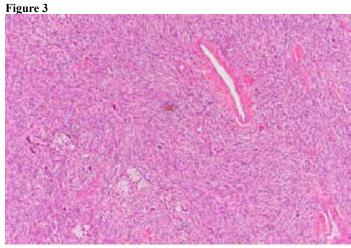


Surgical exposure of the lesion

Figure 2



Excised specimen



Shows a circumscribed cellular spindle cells with interspersed staghorn

vessels and occasional multinucleate giant cells.



Enucleation of The Odontogenic Keratocyst Cyst Located at The Anterior of The Mandible

<u>Mustafa Sami Demirsoy</u>, Mehmet Kemal Tümer Tokat Gaziosmanpasa University, Faculty of Dentistry, Oral and Maxillofacial Surgery Department

Objective: The odontogenic keratocyst (OKC) is originated from dental lamina remnants or basal cells of the overlying epithelium. Essential features of odontogenic keratocyst are resistance to the treatment and the high rate of recurrence. In this case report, we aim to present an odontogenic keratocyst located at, an uncommon site, anterior of the mandible.

Case: A 23-years-old female patient was admitted to our clinic complaining of slight swelling and pain in the anterior region of the mandible. On clinical examination, displacement of the mandibular anterior teeth was seen, but any other pathology could not be detected. On radiological examination, a unilocular, approximately in size 4x2 cm, radiolucent cystic lesion located at the anterior of the mandible was detected. As a result of the vitality tests, the teeth 31-41-42-43 and 44 were devital. After root canal treatment, sulcular and vertical incisions were done between the distal parts of teeth 33 to 45. The cystic lesion was enucleated, and the site was sutured primarily.

Conclusion: Recurrence rates were observed after marsupialisation followed by enucleation (17.8%) and enucleation alone 20.8%.

The cystic lesion is far from anatomical landmarks, and the patient has all the teeth in her mouth. Moreover, due to previous reports, there is little difference in the percentage of recurrence rates after marsupialisation followed by enucleation and initial enucleation. Regard with these reasons initial enucleation was chosen as the treatment modality.

Keywords: Enucleation, Mandible Anterior, Jaw Cysts, Odontogenic Keratocyst Cysts



Treatment Of Dentigerous Cyst in an Elderly Patient With Chronic Renal Failure

<u>Mustafa Sami Demirsoy</u>, Mehmet Kemal Tümer, Aras Erdil Tokat Gaziosmanpasa University, Faculty of Dentistry, Oral and Maxillofacial Surgery Department

Objective: Dentigerous cysts are common developmental benign lesions of both jaws, usually related with unerupted teeth. Usually the cyst is symptomless unless it becomes secondarily infected. We aim to present a case of dentigerous cyst located in retromolar and angular portions of the right mandible which was treated with decompression followed by enucleation.

Case: A 71-years old, male patient referred to our clinic complaining of moderate pain. In his medical history, he had chronic renal failure and on oral anticoagulant and antihypertensive therapy.

Onclinical examination, 34-36-46 teeth were missing and any other pathology couldn>t be detected. On radiological examination, an unilocular cystic lesion was located on right retromolar and angular portions of the mandible associated with an impacted third molar.

Due to approval of local anaesthetic administration after consultation with nefrology clinic, marsupialisaiton was planned.

Initially, the second molar was removed and the specimen was taken for pathologic examination. A suction tube was alinged for drainage. The pathological examination revealed that the lesion was a dentigerous cyst. After 7 months follow-up period the resolution of the lesion was fair to perform enucleation.

Conclusion: Due from chronic renal failure is a contraindication for general anaesthesia, marsupialisation followed by enucleation was planned under local anaesthesia. Dentigerous cyst is a benign lesion of the jaws, so satisfactory clinical outcomes can be obtained by less invasive techniques. Considering general condition of the patient and the benign nature of the lesion, such large dentigerous cystic lesions can be treated by marsupialisation followed by enucleation.

Keywords: Chronic Renal Failure with Hypertension, Dentigerous Cysts, Impacted Mandibular Third Molar, Marsupialisation Followed by Enucleation



Pre-prosthetic Treatment of A Sublingual Neurofibroma in A Neurofibromatosis Type-1 Patient: A Case Report

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Objective: Neurofibromatosis (NF) is an autosomal dominantly inherited genetic disorder. In NF type1 patients oral findings had been reported up to 92 %. Enlargement of fungiform papillae and tongue, nodular neurofibromas on the floor of the mouth are some common oral findings. We aim to present a case of partial resection of sublingual nodular neurofibroma in an NF-1 patient due to pre-prosthetic purpose.

Case: A 53 years old, female patient referred to our clinic complaining of speech difficulty and prosthetic failure depending on the sublingual growing mass located on the right side of the floor of the mouth. Her clinical appearance was unique and specific to neurofibromatosis patients. On clinical examination, large, multinodular, resilient, attached to tongue and floor of the mouth, a mucosa-coloured mass was detected. A 3.5x2x1cm portion of the mass was resected. The pathologic examination confirmed the diagnosis of neurofibroma. The case was followed-up for one year, and it was seen that clinically there was no growth in the mass and the patient was able to use the prosthesis which was manufactured postoperatively

Conclusion: Oral manifestations in neurofibromatosis patients are common, and tongue is the most common site involved. Surgical therapies of such lesions have a high risk of bleeding. On the other hand, the complete removal of the lesion is not recommended if the neurofibroma is not an obvious impediment or if the patient>s condition will not improve with surgery. Also, despite the past thoughts, no correlation between surgery and the malign transformation was found.

Keywords: pre-prosthetic surgery, neurofibroma, tounge, genetic disorders



Prosthetic Rehabilitation of Accidental Maxillofacial Gunshot Injury Using Dental Implants

Ahmet Altan¹, <u>Mustafa Sami Demirsoy</u>¹, Bilal Holoğlu² ¹Tokat Gaziosmanpasa University, Faculty of Dentistry, Oral and Maxillofacial Surgery Department ²Tokat Gaziosmanpasa University, Faculty of Dentistry, Department of Prosthodontics

Objective: Maxillofacial defects cause aesthetic, phonetic and functional problems that make it impossible for individuals to perform daily routines normally because of their location. Gunshot injuries are combined defects. The angle of the gun determines the prosthetic treatment option in gunshot injuries, because of the location and width of the affected defect. In this clinical report, we aim to inform an implant supported prosthetic rehabilitation of a maxillary defect in a patient who had acquired a gunshot injury in childhood.

Case: A 56-years old male patient referred to our clinic with acquired Aramany type-I defect due to a gunshot injury in his childhood. He had been using a hollow bulb type obturator. Because of stability-loss of the obturator, patient was complaining speech, swallowing and chewing difficulties. According to consultation with prosthodontic clinic and CT assessment a new dental implant supported obturator was planned.

Conclusion: The defect in our case had caused an oro-nasal communication (OAC) which caused phonetic, chewing and swallowing impairments. With our treatment modality the communication can be distinguished by three dental implant supported hollow bulb type obturator. Due to our experience dental implants can contribute the stability and retention of these kind of obturators.

Keywords: Aramany Type-I Defect, Dental Implant, Maxillofacial Defect, Prosthetic Rehabilitation



Treatment Of An Odontogenic Keratocyst In Mandible With Decompression Followed By Enucleation: A Case Report

Ahmet Altan, Aras Erdil, <u>Sefa Çolak</u>, Nihat Akbulut Tokat Gaziosmanpasa University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery

Objective: The odontogenic keratocyst consists of dental lamina remnants or basal cells of the overlying epithelium. It has high recurrence rates depending on the treatment choices. We aim to present a case of an odontogenic keratocyst located in retromolar and ramal portions of the left mandible which was treated with decompression followed by enucleation.

Case: A 64 years old, female patient referred to our clinic complaining of moderate pain on left mandible. On clinical examination, partially edentulous mandible was detected, but any other pathological could not be detected. On radiological examination, a multilocular, cystic lesion which was located on left retromolar and ramal portions of the mandible was detected. Under local anaesthesia two bony windows were prepared, on the retromolar and ramal regions. Two suction tips aligned for the cyst cavity and fixated to surrounding mucosa. The pathological examination of specimens revealed that the lesion was an odontogenic keratocyst. After 10 months follow up period the resolution of the lesion was fair to perform enucleation. By enucleation, the remnants of the lesion were removed, and the site was sutured primarily.

Conclusion: Due to high recurrence rates of odontogenic keratocysts and proximity to the inferior alveolar nerve in our case, decompression before enucleation was performed. Marsupialization and decompression are distinct surgical techniques to reduce the sizes of odontogenic keratocysts. Although resection provides the highest cure rates, unveils significant morbidities such as facial disfigurement. Also, decompression followed by enucleation offers superior treatment success rates than initial enucleation regarding recurrence rates.

Keywords: Odontogenic Cysts, Decompression, Surgical, Jaw Cysts



PP-010 Cemento-Ossifying Fibroma (COF) of the mandible: A case report

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Objective: This presentation attempts to show surgical treatment of a case cemento-ossifying fibroma of the mandible.

Case: A 31 years old female patient reported to the outpatient department with a chief complaint of painless swelling in the lower right back tooth region. Patient didn't have trauma history and paraesthesia. On palpation lesion had no pulsations and no fluctuation. Osteoclast type giant cells were seen in the aspiration biopsy. After that received an incisional biopsy was reported as the benign fibro-osseos lesion.Under general anesthesia, the curettage of the lesion was discussed with the patient and the patient accepted the procedure.

Conclusion: Cemento-Ossifying Fibroma should be considered in the differential diagnosis of lesions that present clinically as a slow-growing tumor. Though there is no classic appearance that can help distinguish it from ossifying fibroma, it appears that the distinction between cemento-ossifying and ossifying variants is academic, as no behavioral differences exist. High recurrence rates call for a thorough surgical treatment approach for such cases.

Keywords: Cemento ossifying fibroma, Benign odontogenic tumour, Fibro-osseous lesions, Benign Fibro-osseous lesions



Pre-op CBCT Image of the tumor

Notice migration of the incisors.



Pre-op Intraoral Image



Notice buccal and lingual expansion of the lesion

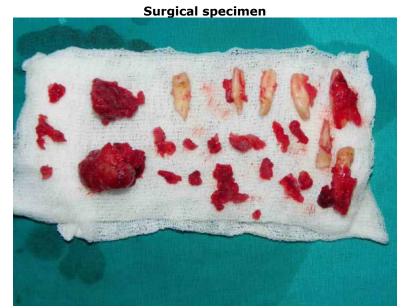


Image of the tumor and extracted teeth.



Surgical Treatment of Oro-Antral Sinus Communications Using Autogenous Bone Graft

Mustafa Sami Demirsoy, Nihat Akbulut, Mehmet Kemal Tümer, Esengül Şen, Ahmet Altan Tokat Gaziosmanpasa University, Faculty of Dentistry, Oral and Maxillofacial Surgery Department

Objective: Extraction of a maxillary posterior tooth, especialy upper molar and premolar teeth, may lead to oro-antral sinus communication (OASC). If the size of the defect is larger than 1-3 mm and not repaired, it may cause maxillary sinusitis or ora-antral fistula. The purpose of this case report is the repair of the ora-antral relationship with the autogenous bone graft after removal of the fractured root tip and the existing retention cyst from the maxillary sinus.

Case: A 20 years old male patient referred to our clinic with OASC. He referred to our clinic the day after extraction of maxillary firs molar.

On clinical examination, OASC was seen.

On radiological examination, in the right side of the posterio maxilla, fractured root tip in the maxillary sinus and cystic lesion were seen.

Under local anaesthesia the root piece and cystic lesion were removed from the maxiller sinus. The part of the OASC on the alveolar crest was closed with the use of the bone fragment taken from the sinus lateral wall to remove the cystic lesion and the root fragment. The operation site was primarily closed by using releasing incisions. Thus, the lateral wall of the maxillar sinus was closed with muco-periostal flap.

Conclusion: Traumatic extractions and foreign bodies in maxillary sinuses are common factors for OASC occurrence. Treatments of OASC's are based on creating a barrier between the oral cavity and maxillary sinus. Autogenous grafts is preferable modalities with low costs and successful outcomes for OASC surgical therapies.

Keywords: Autogenous Bone Graft, Fractured Root Tip, Maxillary Sinus, Oro-Antral Sinus Communications, Retention Cyst



PP-012 Periapical Cemental Dysplasia, 2 Year Follow Up

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Tokat Gaziosmanpasa University, Faculty of Dentistry, Oral and Maxillofacial Surgery Department

Objective: Periapical cemento-osseous dysplasia (PCOD) is described as a reactive or dysplastic fibro-osseous lesions (FOL) in the tooth-bearing area, presumably of periodontal ligament or unknown aetiology. PCOD can be sub-divided into periapical cemental dysplasia (PCD), florid COD and other types of COD. In this case report, we aim to present an PCD located at the mandible which associated with anterior teeth.

Case: A healthy 44 years old female was referred to our clinic from the department of oral diagnosis and radiology for evaluation of an asymptomatic radiolucency at the apexes of the mandibular anterior teeth (31-32-33-41-42-43).

On radiological examination, different size of radiolucency at the apexes of the anterior mandibular teeth were observed.

According to the vitality test results of related teeth, all the anterior mandibular teeth were vital. Bone biopsy was performed from the largest lesion around the apex of the tooth number 33. Biopsy results were explained to the patient and there were no invasive procedures unless there were pain and expansions. The patient was informed to come to the control every six months.

Conclusion: Routine controls of the patient who has been followed for 2 years are performed. When the patient first applied to the clinic, the biopsy was performed on the early period and due to follow up results it was seen on mid-stage of the disease. Radiographs show gray scale changes in the lesions.

Keywords: Mandible Anterior, Periapical Cemento-Osseous Dysplasia, Periapical Cemental Dysplasia



Intra-articular Injections of Sterile Salin, Hyaluronic Acid and Platelet-rich Plasma for the Treatment of Temporamandibular Joint Osteoarthritis: Case Presentation

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Objective: Effective management of temporamandibular disorders (TMD) as non-invasive conservative treatment modalities, have been researched in many years. The aim of this present case was to assess whether stage by stage intra-articular injections decrease the symptoms of TMD.

Case: A 45-year-old female was referred to School of Dentistry, complaining of simultaneous pain, limited mouth opening and temporamandibular joint (TMJ) sounds. In radiographic examination, subcondillar bone disorder was observed. Also, soft tissue attachments, structural alterations of cartilage and anterior disc dislocation were evaluated on MRI. Firstly, anterior repositioning splint therapy was performed to eliminate pain and articular disorders that related bruxism. Treatment was planned as follows; arthrocentesis, hyaluronic acid and platelet-rich plasma (PRP) injections. There was a 6-month period between each treatment. The patient had follow-up postoperatively at the intervals of 1th week, 1th month and 6th months for interincisal distance, pain and TMJ sounds. Pain was reduced initially following the arthrocentesis, although, the symptom was recurred after 1th month. However, mouth opening was increased by all injections. TMJ sounds were altered following 6 th months.

Conclusion: Treatment of degenerative conditions of the temporaandibular joint could be symptomatic and rehabilitate to patients' life quality. Therefore, intra-articular enjections could be effective to reducing symptoms in proper diagnosis.

Keywords: Temporamandibular disorders, Arthrocentesis, Hyaluronic acid, Platelet-rich plasma injection



Assessment of Orthodontic Management on Secondary Alveolar Bone Grafting in Patients with Unilateral Cleft Lip and Palate: A Case Report and Short-Term Radiographic Analysis

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Objective: The aim of this present case was evaluate of slow maxillary expansion effect on unilateral cleft lip and palate and alveolar bone graft needed after orthodontic traction of maxillary canine tooth.

Case: A 13-year-old girl who has non-syndromic incomplete unilateral cleft lip and palate, was referred to School of Dentistry, complaining of maloclussion and unesthetic apperance of maxillary anterior teeth. In clinical examination, anterior crossbite, primary left maxillary lateral and canine were observed. The patient who has maxillary retraction with straight profile was evaluated on cephalometric analysis. Cone beam computed tomography was taken before orthodontic traction of maxillary canine tooth and secondary alveolar bone graft surgery. The dimension and changes of alveolar bone cleft was evaluated on Kodak CS 3D programme. Also, Enemark's scoring was used to measure of marginal bone level around left maxillary central incisor and canine on intraoral films, postoperatively 1 month, 3 months and 6 months. Before slow maxillary expansion, the dimension of alveolar bone cleft was found in lower than postoperatively at 6-months. While the amount of marginal bone level in 3th and 6th months was higher than postoperatively at 1th month, Enemark's scoring was calculated the average as 2,5.

Conclusion: This case has a promising results similarly in literatures. It can be improve on resorption pattern with long term follow-up and differet bone graft material selection.

Keywords: Maxillary expansion, Secondary alveolar bone grafting, Orthodontic traction, Marginal bone level



PP-015 Stafne Bone Defect: Report of Two Cases

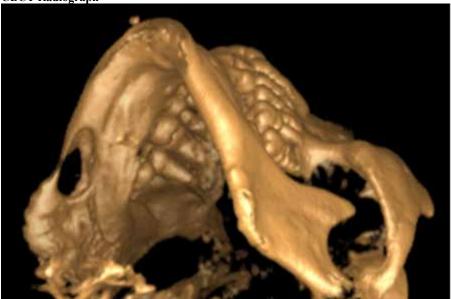
<u>Rıdvan Güler</u>, Bekir İlyas, Kamil Serkan Ağaçayak Dicle University, Faculty of Dentistry, Departmant of Oral and Maxillofacial Surgery, Diyarbakır, Turkey

Objective: Stafne bone defects are asymptomatic lingual bone depressions of the lower jaw. In 1942, Stafne described for the first time 35 asymptomatic, radiolucent cavities, unilaterally located in the posterior region of the mandible, between the mandibular angle and the third molar, below the inferior dental canal and slightly above the basis mandibulae. In this study, the clinical and radiological characteristics of 2 cases of Stafne bone defects were described. Orthopantomograph and CBCT were used for diagnosing the defects.

Case 1: A 42 years old male patient applied to our clinic for routine dental checkup. As a result of panoramic radiological examination, a well-defined radiolucent lesion was observed under the inferior alveolar dental canal in the right mandibular angular region. The patient had no symptoms. Palpation of the defect was not painful, and the cavity could be palpated by bidigital palpation. Cone beam computerized tomography was found appropriate for further evaluation. Results showed an oval-shaped, radiolucent area of cystic aspect and regular, well-defined cortical outline with a little buccal cortical resorption. **Case 2:** A 57 years old male patient applied to our clinic for routine dental checkup. As a result of radiological examination, a well-defined radiolucent lesion was observed under the inferior alveolar dental canal in the right mandibular angular region. The patient had no symptoms.

Conclusion: Stafne bone defect was an incidental finding, presenting no evolutionary changes, and as such conservatory therapy based on periodic controls was indicated. Currently, complementary techniques such as CT are sufficient to establish a certain diagnosis.

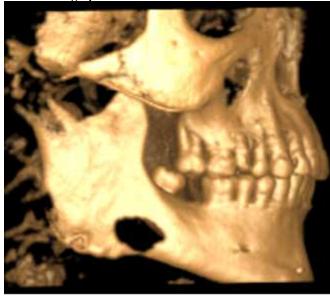
Keywords: stafne bone cyst, mandible, stafne bone defect



CBCT Radiograph



CBCT Radiograph



Panoramic radiograph



Panoramic radiograph





Eruption of Impacted Permanent Teeth after Treatment of a Dentigerous Cyst: A Case Report

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Objective: Dentigerous cysts are the most common developmental odontogenic cysts. It is a benign and asymptomatic intraosseous lesion that affects the bones of the maxillofacial complex, interfering with tooth eruption. Although enucleation is the treatment of choice, marsupialization is the better option for cysts involving unerupted permanent teeth.

Case: 8-year-old male patient reported to the Department of Oral and Maxillofacial surgery with a chief complaint of swelling and pain which was enlarging slowly on left side of mandible since last 1 month, leading to facial asymmetry. On intraoral examination, a hard swelling in 73, 74, 75 regions was found with obliteration of the buccal vestibule. In the panoramic radiograph, an oval-shaped, unilocular radiolucency was noticed around the developing 1-2 st premolar with a radiopaque border. A preventive approach was followed to preserve the developing 1-2 st premolar. Therefore, marsupialization of the lesion was planned through the extracted socket of grossly decayed deciduous 1st molar to create a window allowing continuous drainage of the cystic content. Follow-up examination revealed the followAfter 1 month, there was slight occlusal movement of the developing tooth bud, but there was no apparent reduction in the radiolucency. After 6 months, there was further occlusal movement of the developing tooth and there was a huge reduction in the radiolucency.

Conclusion: In this case, we present the early diagnosis and treatment of dentigerous cyst related teeth in childhood. It should be kept in mind that marsupialization is the first treatment option in cases like this.

Keywords: Dentigerous cyst, enucleation, marsupialization, mixed dentition

intraoperative photograph

intraoperative photograph





Panoramic radiograph



postaoperative periapical radiograph (3 mouth)



postaoperative radiograph (1 mouth)





The Platelet Rich Fibrin Application To Prevent MRONJ Occurrence In An Osteoporosis Patient: A Case Report

<u>Nihat Akbulut</u>, Aras Erdil, Ahmet Altan Tokat Gaziosmanpaşa Üniversitesi Diş Hekimliği Fakültesi Ağız, Diş ve Çene Cerrahisi

Objective: Medication-related osteonecrosis of jaws is seen on jaws after medication with bisphosphonates, antiresorptive or antiangiogenic therapies.1 Even though there are still controversies on precise treatment modality, PRF clots can induce healing and prevent osteonecrosis occurrence. PRF reveals positive effects because of containing growth factors, increasing collagen production, stimulating angiogenesis.2 We aim to present a case of extraction, radicular cyst enucleation and PRF application simultaneously in a patient who has been taking an oral bisphosphonate for osteoporosis treatment.

Case: A 40 y/o female patient referred to our clinic complaining of moderate pain and a cystic lesion related to lower left second premolar. Her medical history revealed that she had been diagnosed osteoporosis and she had been on oral bisphosphonate (alendronate) therapy for seven years. The patient was warned about complications due to bisphosphonate usage, and after her approval extraction of the lower left premolar, cyst enucleation and PRF application were planned. The intervention was achieved under local anaesthesia. The lesion was diagnosed as an inflammatory radicular cyst by pathological examination. The patient recovered uneventfully.

Conclusion: Although the risk of MRONJ occurrence is low with oral bisphosphonates, also the extensity of intervention determines the risk.3 PRF is a good regulator due to the factors in its content.4 In our case PRF was used for expected risks, and successful clinical outcomes were obtained.

Keywords: Bisphosphonate-Related Osteonecrosis of the Jaw, Osteonecrosis, Alendronate, Platelet-Rich Fibrin



Treatment Of An Oro-Antral Communication Using Autogenous Bone Graft And Buccal Fat Pad: A Case Report

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Objective: Oro-antral communications (OAC) mainly occur by extraction of upper molar and premolar teeth due to anatomic proximity of these teeth's roots within maxillary sinus.¹ Defects larger than 2mm if left untreated, can lead to acute sinusitis symptoms, infection or chronic sinusitis.² In this case report, we aim to present the elimination of an OAC by removing a foreign body in maxillary sinus and repairing the defect with an autogenous graft and buccal fat pad.

Case: A 71 y/o male patient referred to our clinic with acute sinusitis and OAC complications. On radiological examination, a bony defect which gave rise to an OAC on the left side of the posterior maxilla was detected. As a result of CT evaluation, a foreign body was detected in the left maxillary sinus near its ostium. Under general anaesthesia the foreign body (root fragment) was removed via Caldwell-Luc technique, pathologic sinus membrane was curetted, and OAC site on the ridge was repaired with bony fragment which was gathered during preparation on the anterior wall of maxillary sinus. Buccal fat pad dissected bluntly and primarily sutured at the grafted site.

Conclusion: Traumatic extractions and foreign bodies in maxillary sinuses are common factors for OAC occurrence.² Treatments of OAC's are based on creating a barrier between the oral cavity and maxillary sinus.³ Autogenous grafts and buccal fat pad are preferable modalities with low costs and successful outcomes for OAC surgical therapies.⁴

Keywords: Maxillary sinus, Oroantral, Sinusitis, Buccal fat pad



Custom-made prostheses for temporomandibular joint reconstruction after partial excision of mandible due to Ameloblastoma

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Objective: Ameloblastoma is a benign local invasive and commonly seen an aggressive, epithelial-induced odontogenic tumor. Comprising %1-3 of all cysts an tumor in oral and maxillofacial region. Mostly seen in mandible than maxilla.its can be derived from dental lamina residues, enamel organ, dentinous cyst epithelium transformation or oral mucosal basal cell. In this case presentation the reconstruction of the mandible with a costum made TMJ prosthesis with partial resection of the tumor that included condyle was presented.

Case: A 40-year-old female patient referred to a private clinic for dental caries. As a result of the routine radiological examination. A large, irregular, radiolucent lesion in the left mandible, including condyle was detected and directed to our clinic. biopsy specimens were taken from the region under local anesthesia. Pathological examination of the specimens revealed ameloblastoma. CT imaging and oral measurements were taken from the patient and a custom made TMJ prosthesis was produced with reference to these materials. Following routine surgical preparations, the patient was operated. Resection was performed using the incision guide. Reached to TMJ area with modified hockey stick incision. The fossa portion of the costum made TMJ prosthesis was fixed to the zygomatic arc. The joint prosthesis was then fixed to the mandible and the mouth opening and closing movement were checked.

Conclusion. No complication was detected in the patient after surgery. No limitation was determined in mouth opening and closing movements. Due to the relapse potential of ameloblastoma, long-term follow-up and reconstruction with iliac bone graft was recommended.

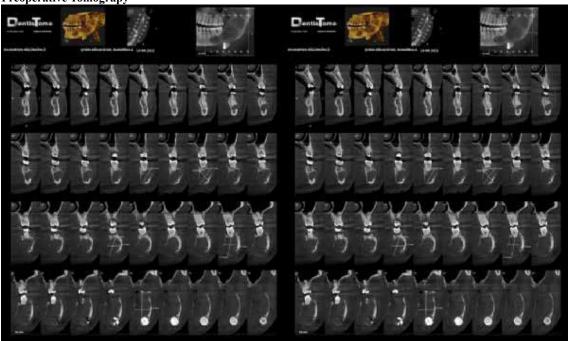
Keywords: ameloblastoma, custom made prothesisis, partial resection



postoperative view



Preoperative Tomograpy





Bone Lid Technique in Symptomatic Cemento-Osseous Dysplasia: A Case Report

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Objective: Fibro-osseous lesions of the jaws are benign entities which normal bone is replaced by both fibrous connective and osseous tissue. This entity consists fibrous dysplasia, ossifying fibroma, and cemento-osseous dysplasias of the jaws. The cemento-osseous dysplasias seen exclusively in tooth-including areas of the jaw, and most likely arise from the periodontal ligament. Cemento-osseous dysplasias are divided into three categories as focal, periapical and florid cemento-osseous dysplasia. The term florid cemento-osseous dysplasia accounts when the lesions involve two or more quadrants of the jaw.

Case: 48 years old female patient referred to our clinic, department of Oral and Maxillofacial Surgery of Bülent Ecevit University, from a private clinic to assess the radioopaque lesion on the right mandible area. The CBCT scan showed a radioopaque lesion on the right mandibular corpus area with a radiolucent border and also similar lesions on apical area of left mandibular bicuspids and second molar tooth. Excisional biopsy with total enucleation and curettage planned for the lesion on the right mandible area. Piezosurgery was used to prepare a bone window in order to reach the lesion and total removal of the lesion was done, also A-PRF was placed into the cavity. Preserved bone window was placed back into its place, covered with A-PRF membrane and the flap was closed. The lesion was sent to histopathological assessment and the laboratory reports came as osseous dysplasia.

Conclusion: Piezosurgery can be used succesfully in surgical debridement of symptomatic cemento-osseous dysplasias or other fibro-osseous lesions as a conservative treatment modality.

Keywords: fibro-osseous lesion, cemento-osseous dysplasia, bone lid



PP-021 Salivary Gland Tumor with Myoepithelial Cell Differentiation: A Case Report

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Objective: Myoepithelial cells are usually found in glandular epithelium of the salivary and other glands. The functions of the myoepithelial cells are to contract when the gland is stimulated to secrete, compressing the underlying parenchymal cells and ease the excretion of saliva. Myoepithelial cell differentiation is seen in both benign and malignant salivary gland tumors.

Case: 39 years old male patient referred to our clinic, department of Oral and Maxillofacial Surgery of Bülent Ecevit University, with the complaint of severe pain and swelling on the left side of face, trismus and severe halitosis. Clinical examination showed 3x4 cm indurated mass in left buccal area, anterior of m. masseter and near to lower left second molar tooth with an exposed necrotic area in the central area of the lesion. The related tooth was also covered with necrotic material. Neck examination showed lymphadenopathy on the submandibular area on the same side. An incisional biopsy was planned on the patient and four biopsy specimens were taken from different areas of the lesion and one specimen from the central necrotic part under local anesthesia. The specimens were sent to histopathological assessment and the laboratory report came as a gland tumor with myoepithelial differentiated cells. The patient was then referred to Department of Otolaryngology of Bülent Ecevit University for the treatment of the potentially malignant lesion.

Conclusion: Because of the relation of myoepithelial cell differentiation with benign and malignant salivary gland tumors, total excision of these oral lesions are recommended to ensure the diagnosis.

Keywords: salivary gland tumor, myoepithelial cell differentiation, histology



Large Dentigerous Cyst Associated With Impacted Canine: A Case Report

<u>Sefa Çolak</u>¹, Emrah Soylu², Ahmet Altan¹, Nihat Akbulut¹ ¹Tokat Gaziosmanpasa University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery ²Erciyes University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery

Objective: Dentigerous cysts are the most common developmental odontogenic cysts in the jaws. Permanent third molars and maxillary canines are the teeth most likely to fail to erupt and consequently are associated most frequently with dentigerous cysts. In this case report, the surgical treatment of dentigerous cyst associated with impacted canine teeth is described in the maxillary anterior.

Case: A 55-year-old female patient visited to the clinic with swelling on the left half of her face. In clinical examination, painful swelling in the palpation was observed. In radiographic examination, impacted canine teeth and this tooth-related well-circumscribed, unilocular, radiolucent lesion were observed. The incisional biopsy showed the lesion as a dentigerous cyst. Under general anesthesia, the cystic lesion was enucleated and the associated canine teeth was removed. The follow-up of the patient continues.

Conclusion: In the treatment of dentigerous cysts are used surgical methods such as marsupialization, decompression and enucleation. Marsupialization and decompression are usually performed in pediatric patients to prevent damage to permanent tooth germs in the treatment of large cysts. In this case, it was decided that the appropriate treatment was enucleation considering patient cooperation.

Keywords: Dentigerous cyst, enucleation, Odontogenic cysts



PP-023 Huge Complex Odontoma in The Mandible Ramus: A Case Report

Ahmet Altan, Sefa Çolak, Serkan Yıldız, Nihat Akbulut Tokat Gaziosmanpasa University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery

Objective: Odontomas are one of the odontogenic tumors commonly observed in the jaws. It is defined as hamartoma rather than a real neoplasm. Odontomas are defined as malformations of dental tissues. Odontomas are classified as complex and compound according to the degree of differentiation of dental tissues and the morphology of odontoma. In this case report, the surgical treatment of a giant odontoma associated with the impacted lower third molar tooth is described.

Case: A 15-year-old female patient referred to our clinic with the complaint of painless swelling in right side of the mandible. Radiographic examination revealed a well-circumscribed, radiopaque mass associated with the right mandibular third molar tooth. Under general anesthesia, the radiopaque mass was excised with a preliminary diagnosis of odontoma and the associated impacted tooth was removed. Histopathological examination of the removed mass revealed that the lesion was complex odontoma. The patient is still on follow-up.

Conclusion: Complex odontomas are generally asymptomatic. Odontomas are usually observed in small sizes. Odontomas have been reported to reach large sizes in rare cases. In these cases, odontomas may cause symptoms such as swelling, facial asymmetry, cortical bone expansion and displacement of the teeth. Routine clinical and radiographic examinations are important for early diagnosis of pathologies such as this.

Keywords: Computed tomography, odontogenic tumors, odontoma



Floride cemento-osseous dysplasia of the mandible: A case reports

<u>Rıdvan Güler</u>, Bekir İlyas, Kamil Serkan Ağaçayak Dicle University, Faculty of Dentistry, Departmant of Oral and Maxillofacial Surgery, Diyarbakır, Turkey

Objective: Florid cemento-osseous dysplasia is a very rare lesion presenting in the jaws. Florid cemento-osseous dysplasia is a multifocal dysplastic lesion and consist of cellular fibrous connective tissue with bone and cementum-like tissue. Most commonly seen in middleaged women and posterior mandibular and maxillar regions are affected frequently. In this report a case of a 37 years old woman who was diagnosed with florid cemento-osseous dysplasia is presented. Radiological and histological findings were the basis of diagnosis

Case: In this case report a 37 year-old female patient who admitted to our department due to pain at her left and right posterior mandibula is presented. The lesion is mostly asymptomatic and often found incidentally on a routine radiographic examination. From the apical regions of the teeth towards the alveolar process, there is a radiopaque-radiolucent lesion that does not pass through the inferior alveolar canal in the mandibular region. A cases were referred to our clinic with the symptoms of mucosal ulceration and pain. Excisional biopsy was performed and came with the result of fluoride cementoosseous dysplasia. Patients' follow-ups are continuing with control radiography. In one case who has no symptom, radiographic follow-up continues after biopsy.

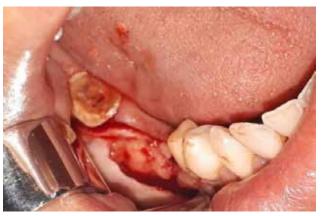
Conclusion: FCOD can present with features of periapical pathology or other osseous lesions. Hence, to arrive at a definitive diagnosis biopsy and histopathologic examination is imperative.

Keywords: Florid cemento-osseous dysplasia, Gigantiform cementoma, FCOD



intraoperative photograph

intraoperative photograph







intraoperative photograph

intraoperative photograph





intraoperative photograph





intraoperative photograph



Panoramic radiograph





The Pyogenic Granulomas Presenting in Different Forms and Regions in The Maxilla

Aras Erdil, <u>Mustafa Sami Demirsoy</u>, Nihat Akbulut, Mehmet Kemal Tümer, Esengül Şen, Ahmet Altan Tokat Gaziosmanpasa University, Faculty of Dentistry, Oral and Maxillofacial Surgery Department

Objective: Pyogenic granulomas are benign vascular tumour-like growths occurring in all ages. Both skin and mucous membranes can be affected. Clinically, these lesions are seen as soft, fibrous, smooth or lobulated exophytic lesions. The aim of this report is to present four cases, which two of them were detected on anterior maxilla and the other two cases on premolar maxillar region.

Case: At At different time intervals, four patients referred to our clinic complaining of gingival growths. On clinical examination;

- The two patients 2 had a large, lobulated, pedunculated, fibrous, pink coloured swelling in the maxilla premolar region,

- One patient had a fibrotic pink coloured swelling, pedunculated in the maxilla anterior, and

- Last patient had an erythematous, pedunculated papule lesion on the maxilla anterior. All of these lesions were excised, the associated tooth surfaces were scaled and pathologic examination verified the lesions as pyogenic granulomas. All affected sites healed without any other complications.

Conclusion: Oral pyogenic granulomas are reactive lesions and arise in response to some kind of stimuli. In our cases, these lesions were associated with the presence of calculus as a result of poor oral hygiene. Improving oral hygiene, following routine dental visits can hinder these lesions. Furthermore, the regions within mouth in which these lesions appear to vary according to the effect caused.

Keywords: Maxilla, Oral Hygiene, Oral Pyegonic Granuloma



Multiple Impacted Teeth And Compound Odontoma In The Mandible: A Case Report

<u>Sefa Çolak</u>¹, Emrah Soylu², Ahmet Altan¹, Nihat Akbulut¹ ¹Tokat Gaziosmanpasa University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery ²Erciyes University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery

Objective: Odontomas are one of the most common odontogenic tumors of the jaws. It is defined as hamartoma rather than a real neoplasm. Odontomas are considered as malformations of dental tissue. In some cases, it causes delay in eruption or impaction of the teeth in the neighborhood. In this case report, treatment of odontoma that mandibular canine and premolar tooth causing remain embedded describes

Case: A 31-year-old female patient was referred to the clinic with complaints of swelling and pain in the anterior mandibula. In clinical and radiographic examination, odontoma and impacted teeth were observed in the premolar region of the mandible. The patient was operated under general anesthesia with a preliminary diagnosis of odontoma. İmpacted premolar and canine tooth extraction was performed. The excised calcified, hard, radiopaque mass was sent for histopathological examination. Histopathological examination was observed that the lesion is odontoma. The patient is still on follow-up.

Conclusion: Odontomas are generally asymptomatic, but in some cases they can cause symptoms such as pain, swelling, expansion of the bone, displacement and impaction of the teeth. Odontomas are unlikely to recur with traditional surgical excision.

Keywords: Delayed tooth eruption, Odontoma, Neoplasms, Odontogenic tumors



PP-027 Cemento-Osseous Dysplasia in Edentulous region: A Case Report

<u>Hüseyin Gülcan</u>, Uğur Gülşen Bülent Ecevit Üniversitesi Diş Hekimliği Fakültesi, Ağız Diş ve Çene Cerrahisi Anabilim Dalı, Zonguldak

Objective: Cemento-osseous dysplasias (COD) are a benign disorder belonging to the group of fibro-osseous lesions. According to World Helath Organization's last classification subdivides COD to 3 groups, If it occurs in periapikal region of anterior teeth; periapical COD, if it is related with a single tooth; focal COD, and florid COD when there is multifocal involvement, existing in more then one quadrant. These three division have same pathological process.

Case: 53 years old female patient with routinely discovered radio opaque mass in right posterior edentulous mandibula referred to Zonguldak Bulent Ecevit University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. Intraoral examination showed that there is no findings except a slight expansion in the region. The radiographic examination revealed radiopaque lesion bordered with radiolucent tissue. Lesion totaly excised. Biopsy was done an histopathological examination showed normal bone is replaced by fibrous tissue, followed by calcification with osseous and cementum-like tissue. The routin radiographs were taken for 3 months. Radiographic examination has showed that there is a significant degredation of lesion and incrising of bone radiopacity.

Conclusion: COD is usually asymptomatic and located in the periapical region of teeth with pulp vitality and discovered with routine radiologic exams. The diagnosis of COD is made with demographic information (age, gender, and ethnicity), clinical (location and number of lesions), and imaging (image type and density) features. This features are important in diagnoses because the affected bone tissue is more susceptible to infections and invesive procedures such as biopsies could cause this affect.

Keywords: benign, cemento-osseous dysplasia, radiopaque



Treatment of Cementoblastoma: A Case Report

Hüseyin Gülcan, Tuğçe Berre Karöz

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Objective: Cementoblastoma is a benign, rare neoplasm of ectomesenchymal origin and it seems less than %6 of all odontogenic tumors. It commonly occurs in males. Radiographically cementoblastoma is well-circumscribed and fusied to affected tooth root. Tumor is a rounded or noduler mass that related with one or more tooth. Mandible is the most affected site, particularly in the molar and premolar region. It usually occurs in the 2. or 3. decades of life.

Case: 12 years old female patient with routinely discovered radiopaque mass related with lower anterior tooth referred to Zonguldak Bulent Ecevit University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. Intraoral examination showed that there is no finding except a slight expansion in the area. The radiographic examination revealed radiopaque lesion fused to tooth root. Lesion was totally excised and tooth was extracted. Biopsy was done and histopathological examination showed cementum-like deposits along with cementoblast-like cells dispersed throughout the calcified matrix. The routin radiographs were taken for 3 months. Radiographic examination has showed that there is a significant degredation of lesion and incrising of bone radiopacity.

Conclusion: The gold-standart treatment consist excision of lesion and extraction of the involved tooth. Although the standart practise to treat this lesion is surgical excision along with the extraction of affected tooth, with few reported cases using tooth-conservative treatment approach. Recurrence is not expected to occur but it does occur when the lesion isn't completely removed.

Keywords: benign, cement, radiopaque



PP-029 Pleomorphic Adenoma Localized in Buccal Mucosa: Report a Case

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Objective: Pleomorphic adenoma is the most common salivary gland tumor with a benign, mixed character. It constitutes 60 % of the all benign salivary gland tumors. Approximately 8 % of pleomorphic adenomas originated from minor salivary glands and most commonly seen in the hard palate. However, rarely it may originate from the other minor salivary glands in buccal mucosa and the tongue. In this case report, excision of the pleomorphic adenoma originated from buccal minor salivary gland is presented.

Case: Clinical examination of a 55-year-old female patient who referred to our clinic with swelling in the right buccal region, showed a solid mass in the buccal mucosa and total excision of the mass was performed with a preliminary diagnosis of lipoma. Excisional biopsy revealed the diagnosis as pleomorphic adenoma. The postoperative period of the patient was uneventfull.

Conclusion: Pleomorphic adenoma may rarely be originated from the minor salivary glands in the buccal mucosa and cause confusions regarding diagnosis with other lesions seen in this region. Therefore, reaching the definite diagnosis can only be possible by confirming the clinical and radiological examinations with histological examination.

Keywords: Excision, lipoma, minor salivary gland



Treatment of mandibular odontogenic keratocyst with marsupialization and enucleation: a case report

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Odontogenic keratocyst (OKC) is benign lesions of the maxillomandibular region and derives from the remnants of the dental lamina. It has locally aggressive behavior and high recurrence rate. OKC occurs most commonly in the mandible, especially in the posterior body and ramus regions. We present the case of a large OKC in a 57-year-old male patient. For the treatment of OKC marsupialization was performed for 1 year with oral appliance and then the lesion was enucleated. This case shows that a large OKC can be treated with a combination of marsupialization and enucleation.

Keywords: Odontogenic keratocyst, marsupialization, enucleation



Treatment of Chronic Infection Associated with Impacted Premolar Teeth

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Objective: The impaction of premolar teeth is a rarely encountered condition and its prevalence is about 0.1 %. Impacted premolars, which are usually asymptomatic, may cause eruption disorders and various pathological conditions. In this case report, treatment of chronic infection associated with impacted premolar teeth adjacent to maxillary sinus, is presented.

Case: A systemically healthy 61-year-old male patient was admitted to our clinic with complaints of expansion and malodor in the maxillary sinus area. After the clinical and radiological examination, it was found that the impacted teeth elevated the maxillary sinus floor, cause expansion in the buccal bone and destruction in the surrounding alveolar bone. The teeth were removed using the buccal approach and the region was curetted. Oroantral communication was not occur.

Conclusion: Although, the impaction of premolar teeth rarely encountered, in some instance it may occur and cause pathological conditions. Early diagnosis and multidisciplinary approach pose an important role to minimize the complications that may observed associated with these teeth.

Keywords: Impacted premolar, infection, radiography



PP-032 Cemento-Ossifying Fibroma of the Mandible: A Case Report

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Objective: Cemento-ossifying fibroma is a rare benign fibro-osseous lesion that originate from the mesenchymal cells of the periodontium. Enucleation or resection may be considered as treatment options of this lesion. Here we present surgical treatment of a cemento-ossifying fibroma located in the ramus of the mandible.

Case: A 12-year-old male patient was admitted to our clinic for routine examination. After clinical and radiological examinations, multilocular and non-expanding lesion was detected in the posterior region of the right mandible. Enucleation was performed under general anesthesia with intraoral approach.

Conclusion: Cemento-ossifying fibroma can exhibit different behaviors clinically and radiologically. After performing differential diagnosis from other fibroosseous lesions conservative treatment such as enucleation with follow-up will be more appropriate treatment option than radical surgeries like resection, especially in young patients.

Keywords: Cemento-ossifying fibroma, mandible, enucleation



Horizontal Ridge Augmentation in the Atrophic Posterior Mandible by Crest Split & Osseodensification Combination: A Case Report

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Objective: In areas where bone width is insufficient, oral rehabilitation is a complex issue. The success of dental implant placement predominantly depends on the presence of adequate bone quantity and quality for the edentulous site. The main benefit of the split crest technique (SCT) is the simple, quick, and predictable way in which the alveolar atrophic crest can be expanded. A bone drilling concept, named osseodensification is achieved using specialized densifying burs which were used in an outward direction to create the osteotomy, so preserving vital bone tissue. We present the utilization of the combination of the split-crest technique and osseodensification drills (DensahTM drills) for horizontal ridge augmentation in the atrophic mandible.

Case: A 45 year old female patient with no systemic disease consulted to our clinic with unsufficient crest width for implant placement for right mandible crest. When the bone buccally exposed, a horizontal corticotomy was performed with microsaws and osteotome to the top of the bone crest. Densah burs were used after first drills of standart implant set for preparation of the implant socket and successful ridge expansion with intact cortical buccal and lingual walls has been achieved. 3.7 mm diameter implants were placed successfully and bovine graft mixed with i-PRF was applied to area.

Conclusion: The combination of split crest technique and densah drills, as we have used, provides an effective and safe bone expansion. The presence of intact bone walls after drilling is important for the procedure and this can be achieved successfully with osseodensification.

Keywords: split crest, osseodensification, graft, PRF



A Lingual Sulcoplasty (Reduction) In Patient with Inadequate Lingual Depth: A Clinical Case Report

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Vesibuloplasty raditionally been approached labially in aim to increase the stability of a denture by increasing the vertical depth of an alveolar ridge. In some cases the lingual sulcus depth also may be inadequate. Lingual reduction is a procedure in which the lingual sulcus's depth increases and restores the mylohyoid muscle movement. This procedure is done by applying a mucosal incision at mucous membrane. The mylohyoid then releases down on the lingual side. The superior part of the flap secures and repositiones to a new sublingual position. A needle passes in intraoral oral side and goes throw the skin below the lower border of the mandible. The suture then fixes to a button down the mandibular. A 65 Years old male Patient attended to our clinic with the complaint of inability to use his mandibular removable denture due to the mobility. The systematic condition of the patient was suitable and a fix restoration with dental implants recommended to the patient but he refused surgery. In clinical examination inadequate lingual depth detected that caused unfavorable movement in the denture. A lingual reduction with extra oral fixation with buttons applied to the patient.

Keywords: Lingual, Reduction, Sulcoplasty



PP-035 Dermoid Cyst in the Buccal Mucosa: A Case Report

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Dermoid cysts in oral cavity are unusual lesions. Their etiology is not yet clear and can be associated with trapped cells as a result of the inclusion error resulting in the development into the ectoderm, mesoderm, and endoderm tissues. Epidermoid and dermoid cysts are benign nature, which may occur anywhere in the body, but most predominantly in the ovary and scrotal regions. Only about 7% are found in the head and neck. The occurrence of such cysts in the oral cavity is extremely rare, with approximately 1.6% located in this area. Dermoid cysts in the mouth are uncommon and account for less than 0.01% of all oral cysts. It is most commonly seen in the head and neck region at the point of embryonic fusion in the lateral eyebrow region, and secondly occurs at the floor of the mouth.

Due to their slow and progressive course, they are usually encountered in the 2nd and 3rd decades. Depending on the size of the mass, dermoid cysts may cause speech, respiratory and swallowing problems.

This case report describes the excision of the dermoid cyst in the buccal mucosa.

Keywords: Buccal mucosa, dermoid cysts, oral cavity



Correction of Secondary Alveolar Unilateral and Bilateral Clefts with Iliac Bone Grafts

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Introduction: Cleft lip and palate deformities are one of the most common birth defects. The alveolar cleft requires bony repair to allow proper eruption of dentition. The purpose of this study is to evaluate success in the repair of alveolar clefts with iliac bone grafts.

Aim: The aim of this study is to restore the function and form of both arches with a proper occlusal relationship and eruption of tooth in the cleft area.

Subjects And Methods: Five patients were selected irrespective of sex and socioeconomic status and whose age was within the mixed dentition period. The iliac crest is grafted in the cleft area and subsequently evaluated for graft success using study models, periapical, and occlusal radiographs.

Results: At the time of evaluation, teeth were erupted in the area and good alveolar bone levels were present. Premaxilla becomes immobile with a good arch form and arch continuity. There are no major complications regarding pain, infection, paresthesia, and hematoma formation at donor site without difficulty in walking. There is no complication regarding pain, infection, exposure of graft, rejection of graft, and wound dehiscence at the recipient site except in one case.

Conclusions: Long-term follow-up is required to achieve maximum advantage of secondary alveolar grafting; the age of the patient should be within the mixed dentition period, irrespective of sex and socioeconomic status. It may be unilateral or bilateral.

Keywords: Cleft lip, cleft palate, iliac bone graft



Augmentation of the Atrophic Posterior Mandible with the Sandwich Osteotomy Technique: A Case Report

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Severe alveolar bone resorption, which occurs after tooth losses, makes difficult or impossible to placement of dental implants. It is an important problem especially in posterior mandible. Many techniques for augmentation of atrophic alveolar bones have been described in the literature. The sandwich osteotomy technique is used to increase vertical bone dimension in jaws. It is stated in the literature that the sandwich osteotomy technique, which is based on graft placement between osteotomized bone segments, has a low complication rate and a high success rate. This case report presents the sandwich osteotomy technique to increase vertical bone dimension in the posterior region of the atrophic mandible.

Keywords: Atrophic mandible, bone graft, sandwich osteotomy, vertical augmentation



PP-038 A Large Florid Cemento-Osseous Dysplasia of the Mandible

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Objective: This report aimed to describe the case of a patient who was diagnosed with florid cemento-osseous dysplasia on the basis of clinical, radiographic and histological findings.

Case: A 49-year-old female patient presented to our department with a chief complaint of pain in the left and right molar region of the mandible for 2 months. She was systemically healthy and extra-oral examination was within normal limits. Intra-oral examination revealed exposure of bone to the oral cavity in molar areas bilaterally with infection and ulceration. There were no teeth in the molar regions. Panoramic radiography was taken to evaluate the dental arches. Multiple, dens sclerotic, well-defined and ovoid radiopaque masses were detected in relation to both mandibular left and right molar regions. Lesions were symmetrical. Sequestrectomy of the exposed and infected osseous structures was done. The obtained specimens were sent to pathological examination. Histopathologically, dens, cell-poor, cement and bone masses were seen. The patient was followed up for 18 months. In the postoperative period, no pain, infection, and exposed bone were observed.

Conclusion: Clinical and radiographic evaluation for the diagnosis of florid cemento-osseous dysplasia is very valuable. Especially bilateral formation is a significant finding. In the presence of exposed bone, surgical treatment is necessary to resolve the patient>s complaint.

Keywords: bone diseases, florid cemento-osseous dysplasia, mandible



Prosthodontic treatment of the edentulous mandible with a 6 implanted supported toronto prosthesis: a case report

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Objective: Implants provide support, stability, function, esthetic and retention for restorations used in fully and partially edentulous patients. Basically two types of fixed implant-supported prostheses used. One is a screw-retained and the other type is a cement-retained prostheses.

Case: This clinical report describes prosthetic treatment of a fully edentulous mandible treated with six dental implants using the 'Toronto Bridge" technique for restoring both function and aesthetics.

Conclusion: Toronto prosthesis is a screwed-in mesostructure with milled abutments for the cementation of single or multiple suprastructures.. This prosthetic option offers advantages of both screw-retained and cement-retained prostheses. The main advantages and disadvantages of this protocol are discussed. Subsequently, they were replaced with Toronto prostheses on six dental implants in mandibular jaw with a 6 months follow-up.

Keywords: Toronto prosthesis, implant supported prostheses, screw retained, cement retained



Figure 1 Initial panaromic film



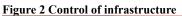




Figure 3 Six months after treatment





Treatment of large osteochondroma of the condyle with condylectomy

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Objective: This report aimed to describe an osteochondroma of a patient>s mandibular condyle which was treated with high condylectomy procedure.

Case: A 43-year-old female subject was referred to the Department of Oral & Maxillofacial Surgery at Necmettin Erbakan University. The patient presented with complaint of increasing asymmetry of her facial features over a period of 12 years. Clinically, there was facial asymmetry of the lower face with mandibular midline shift to the left side and limitation in 26 mm, with deviation and pain on the right side during the mouth opening. Intraorally, there was a satisfactory occlusion at the left side, but a posterior open bite at the right side. Preoperatively panoramic radiograph and cone-beam-tomography were taken and additionally bone scintigraphy was also examined, and increased activity in the right TMJ was found. Under general anesthesia, the surgical procedure was performed using preauricular approach for the high condylectomy. The lesion was totally excised and the articular disc was repositioned. There were no changes in the region innervated by the facial nerve branches. After surgery the facial asymmetry, functional occlusion and mouth opening improved significantly. Mouth opening was 34 mm at weeks 8 postoperatively. Orthodontic treatment was started to the patient for the correcting of the occlusion.

Conclusion: High condylectomy technique is a good approach for management of the osteochondroma or active condylar hyperplasia. As in this case report, surgical intervention is essential in the treatment of dentofacial deformities due to condylar growth.

Keywords: condylectomy, mandibular condyle, osteochondroma



Spontaneous Bone Regeneration of the Resected Mandible in An Elderly Patient: An Unusual Case

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Objective: The common cause of partial bone loss is mandibulectomy which was performed for treatment of a tumour or tumour-like lesions. After this procedure, the literature shows rare cases of spontaneous bone regeneration in the resected area. Most of them observed in young patients. In this case report, we introduce a case of a 73-year old female patient who shows spontaneous bone regeneration after partial mandibulectomy.

Case: A 73-year-old female patient applied to our clinic for extra-oral fistula in the right submandibular region. In the patient>s history, it was learned that she had undergone I.V bisphosphonate treatment for 5 years due to breast cancer. In the intra-oral examination, an exposed bone area was seen on the right corpus of the mandible. There was no extraction history last ten years on that site. The fistula was noticed in the related area in the extra-oral examination. She was diagnosed with medical related osteonecrosis. Partial mandibulectomy and reconstruction plate were planned for rehabilitation. The entire necrotic area was removed with a safe margin of 5 mm under general anaesthesia. The reconstruction plate was fixed and the flaps were sutured for primary closure. There was no recurrence in the following months. One year later, radiographic examination revealed new bone formation throughout the region.

Conclusion: If the periosteum is preserved in benign lesions, the new bone formation can be achieved even in elderly patient after partial mandibulectomy.

Keywords: mandibulectomy, periosteum, reconstruction, spontaneous bone regeneration



Treatment of Unilateral Mandibular Angle Fracture Associated With Third Molar Extraction: A Case Report

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Objective: The extraction of mandibular third molars is a common dental procedure. Pain, hemorrhage, swelling, infection, trismus, neurologic injuries and surrounding soft and hard tissue damages are most frequent complications of third molar surgery. Iatrogenic mandible fractures associated with third molar surgery is very rare. In this case report, treatment of a mandibular angle fracture after third molar extraction with open reduction and internal fixation was presented.

Case: A 38-year-old male patient was referred to Ercives University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery with the complaint of mandible fracture during third molar extraction in another dental clinic. In clinical examination, there was swelling on his right side of the face and extraction socket of right mandibular third molar was seen intra-orally. Posterior open bite on the right side and paresthesia of the right lower lip was also observed. In cone beam computed tomographic evaluation, a unilateral unfavourable mandibular angle fracture was observed. The patient was treated under the general anesthesia with open reduction and two miniplates were inserted to the fracture line without post-operative intermaxillary fixation. An eventful healing was observed without any complication in three months follow up.

Conclusion: Mandibular angle fracture is a rare complication of third molar extraction. Dentists must be aware of this complication and perform adequate surgical planning and techniques for dental extraction to reach satisfactory surgical outcomes.

Keywords: angle fracture, extraction, mandible, third molar



Evaluation of the outcomes of Interdental and Segmental Corticotomy-assisted orthodontic treatment with cephalometric and three-dimensional imaging: Case report

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Objective: The aim of this case report was to assess the effects of interdental and segmental corticotomy-assisted orthodontic treatment on craniofacial system in a 15 year-old borderline case.

Case: Corticotomy assisted orthodontic treatment was planned for a borderline Class III patient with 1 mm crowding in the mandible and 5 mm crowding in the maxilla. Interdental corticotomy was performed in the maxilla while segmental corticotomy was performed in the maxilla while segmental corticotomy was performed in the upper canines from right to left sides in the interdental corticotomy procedure, whereas these decortications were performed just at the distal sides of the canines in the segmental corticotomy at the apical area in both procedures. Bovine-derived bone graft and platelet rich fibrin were placed at the corticotomy sites. Orthodontic wires were changed weekly for the first month after surgery. Three-dimensional photography (3DMD) and cephalometric radiographs were obtained before and 6 months after corticotomies.

Conclusion: Significant decreases in the lower incisor angles and increases in the upper incisor angles were observed at the end of the fixed orthodontic treatment. When the effects on soft tissue were evaluated, it was observed that the projection of the lower lip was decreased significantly. Active orthodontic treatment was completed within 13 months and ideal overjet and overbite were obtained. Significant amount of incisor movements were achieved with this technique by preserving periodontal tissues.

Keywords: Accelerated orthodontics, Corticotomy-assisted orthodontic tooth movement, 3dMD



Evaluation of Osteoperforation Method for eruptioning of impacted canine: Case report

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Objective: Micro-osteoperforation is one of the methods of accelerating bone remodeling. This technique has been developed based on previous animal studies. In this case report, we aimed to evaluate the effectiveness of osteoperforation method for the treatment of impacted canine tooth.

Case: A 17-year-old female patient diagnosed with unilateral impacted maxillary canine. It was observed that the tooth was at the palatal side and did not cause any resorption surrounding adjacent teeth based on radiological examination, The tooth was planned to be erupted by means of the elastics between a removable appliance in the mandible and a button which was inserted on the impacted tooth. The impacted canine was reached surgically by raising a full thickness flap traditionally. A chain button was bonded and small rounded perforations were performed on the vestibular bone of the canine (osteoperforation technique). Elastic usage in vertical direction was instructed to the patient. The impacted tooth was erupted in the 8 months.

Conclusion: Osteoperforation method for eruptioning of impacted canine was effective and time saving treatment modality for this case report. This method can be used as an alternative method to erupt palatally impacted canine teeth.

Keywords: Accelerated tooth movement, Impacted canine, Osteoperforation



A CASE REPORT: Bilateral Eminectomy Surgery for Recurrenet Tmj Dislocation

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Objectives: the recurrent dislocation of temporomandibular joint is so rare. The recurrent dislocation affects the life of patient so negatively. The dislocation might be acute or chronic. The recurrent dislocation is defined as relapsing of acute dislocation. This situation continues for months or years.

Case: The patient applied our clinic with the complain of dislocation of temporomandibular joint during function. The dislocation of temporomandibular joint diagnosis has been confirmed after rdiologic and clinic treatment. The patient is having trouble about closing his mouth and feeling so much pain. The eminoctomy surgery was planned for the patient. The patient was taken to operation under general anesthesis after routine Operation arrangements. The articular eminence was reached by modified hockey stick incision. The articuler eminence was shaped by the help of burs and osteotoms.

Conclusion: No complication was determined on the patient after Operation. The pains which the patient was complaining about was totally disappeared after the 2nd day of Operation. Eminectomy is a fast resulted and trustable procedure that can beapplied on recurrent tme dislocation. In this case presentation we presented eminectomy Operation for a patient who has recurrent tme dislocation.

Keywords: dislocation, eminectomy, Temporomandibular joint

after eminectomy on left side





after eminectomy on right side



before eminectomy on left side



before eminectomy on right side





Evaluation of Segmental Tipping Technique and Maxillary Advancement Surgery in a patient with large alveolar cleft and maxillary retrognathia: Case report

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Objective: In this case report, we aimed to present the results of segmental tipping technique and maxillary advancement surgery in a patient with large alveolar cleft and maxillary retrognathia.

Case: A 15-year-old girl patient with unilateral cleft lip-palate and maxillary retrognathia had a large alveolar cleft and vertical deficiency at the cleft side. This vertical malalignment of the segments was not menagable with the limits of orthodontic treatment. Therefore orthodontic braces were inserted at the cleft and non cleft side segmentally. The Le Fort I osteotomy was performed at the cleft side traditionally and the segment was mobilized. Therafter it was pulled downward gradually by using orthodontic elastics following the mobilization. Once cleft and noncleft sides were aligned, elastic usage was continued for three more weeks for the retention. The cleft defect was reduced significantly by this way. The residual cleft defect was grafted with autogenous bone graft from iliac crest as the second step. Six months following grafting procedure, maxillary advancement was performed for maxillary retrognathia.

Conclusion: The large cleft defect was reduced and able to be repaired easily after segmental tipping of the cleft side. The vertical and horizontal transport of the segment provided the alignment of the cleft and non cleft sides.

Keywords: Large Alveolar Cleft, Le Fort I Osteotomy, Segmental Tipping Technique



The Reconstruction of Alveolar Cleft with Iliac Bone Graft

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Objective: Alveolar bone atrophy might be seen by the reason like senility or tumor resection. Otogen grafts are accepted as gold standart today for these defects. Intraoral graft zones is used for small defects like one tooth but for edentulous jaws extraoral zones are more suitable. In this case the reconstruction with iliac bone graft on a patient who has alveolar cleft has been presented.

Case: The 14 – year old- woman patient was taken to Operation for the reconstruction of alveolar cleft with iliac bone graft after routine Operation arrangements. The double layered flap was prepared in palate and alveolar mucosa. Firstly nasal floor was stitched with 4/0 resorable sutures.. The graft was shaped to fit exactly in the cleft line on that new nasal floor. The decortication was done in surrounding bone and the greft was located on cleft line. The graft was stitched with second floor flap by 3/0 vicryl. The Operation was completed by bleedeing control.

Conclusion: There has been met with no complication on both cleft and donor zones. The patient was directed to orthodonty service to continue her orthodontic treatment after discharging the patient. In orthodontic department taking the teeth formation to optimum conditions and the rehabilitation of the zone by dental implants was planned after the osseointegration of graft.

Keywords: iliac bone graft, alveol cleft, otogen graft



cleft side with iliac bone graft



flap of nasal floor on cleft side



preoperative view of cleft side





A Case Report: Condylectomy Surgery Due to Grade I Chondrosarcoma

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Objectives: Chondrosarcoma is a slow-growing malignant tumor characterised by the formation of cartilage by tumor cells. Next to osteogenic sarcoma, chondrosarcoma is the most common bone tumor. It seldom occurs in the head and neck region and can be found even more rarely in the temporomandibular joint. Treatment of the tumor in the temporomandibular joint is very difficult, because of involvement of facial nerve, parotid gland and the close proximity to the cranial base.

Case: A 56-year-old female patient was referred to our hospital with left auricular pain that had been present for 6 months. There was no limitation in the mouth opening. Objective clinical examination showed the patient had no facial paralysis and asymmetry. CBCT examination showed a bone resorption in mandibular condyle. Surgical treatment was planned with an extraoral approach by an extended preauricular incision. The mass was dissected and surgically resected from adjacent perilesional tissue in a single block therefore the facial nerve was protected. Microscopic examination of sections stained with H&E revealed non-cellular mesenchymal tumor in a small-lacunae which is located in myxoid structure matrix. The diagnosis was a grade I chondrosarcoma.

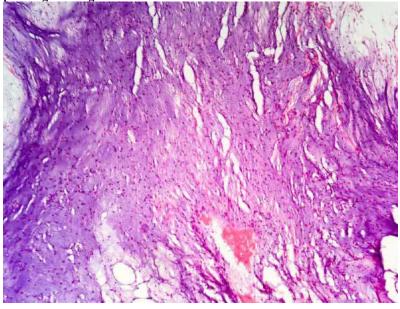
Conclusion: Chondrosarcoma in temporomandibular joint is very rare. Chemotherapy and radiotherapy are ineffective in chondrosarcoma, wide resection of the tumor is key to the success. In the other hand chemotherapy and radiotherapy should be considered especially in unresected cases. In our case, the patient was operated under general anaesthesia with an extraoral approach. After 7 months of follow-up there was no recurrence.

Keywords: chondrosarcoma, condylectomy, temporomandibular joint intraoperative view

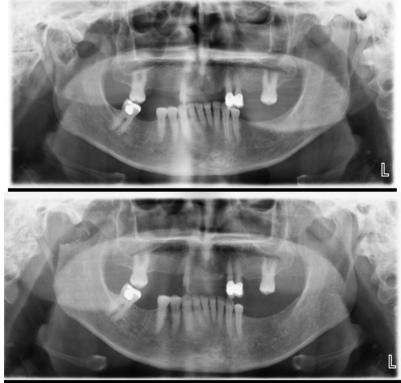




pathological image



preoperative and postoperative view





Reconstruction of the mandibular crest with iliac bone in the horizontal inadequacy after keratocyst enucleation

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Objective: keratocyst constitutes 7.8% of all jaw cysts and the incidence varies between 4-16.5%. Mostly seen in the 2nd and 4th decade...mandible is more common than maxilla. anterior iliac bone graft can be endicated when 30-50 ml volume of corticocancellous bone is needed or Rehabilitation of 5 cm wide defects, sinus augmentation, alveolar clefts, horizontal and vertical losses of maxilla and mandible. In this case, our aim is to reconstruct the defect region with iliac bone.

Case: A 30-year-old female patient was admitted to our hospital with pain in the right mandibular posterior region. Routine radiological and clinical examinations revealed a bone-destructive cystic lesion at the relevant site. A biopsy was performed under local anesthesia and the sample was sent to the pathology laboratory. The patient was operated under general anesthesia with the diagnosis of keratocyst. The cyst tissue was cleared and a reconstruction plate was used to support the weakened mandible. No recurrence was detected with radiological examinations after 2 years follow-up. Iliac graft surgery is planned for reconstruction of alveolar crest which is insufficient as horizontal. The patient was operated under general anesthesia following routine surgical preparations. Cortical and spongious bone were taked from the iliac region, using split technique and adapted to the recipient site.

Conclusion: enucleation, enucleation and carnoy solution, enucleation and peripheral osteotomy, enucleation carnoy and osteotomy, enucleation and cryotherapy, marsupialization, resection can be named as a treatment options. The lost bone volume can be reconstructed with the iliac graft so that there is considerable bone gain for future dental treatment and occlusion.

Keywords: keratocyst, iliac bone graft, enucleation



iliac graft



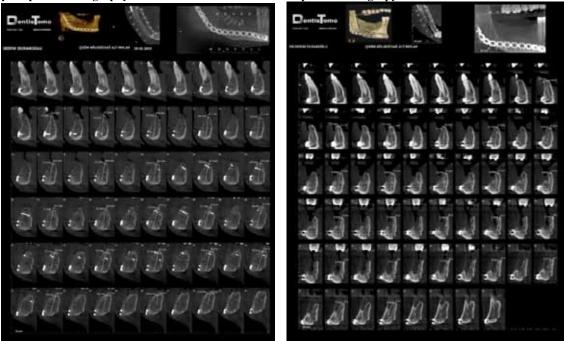
intraoperative view





postoperatif tomography

Preoperatif Tomograpy





Case Report: Excision of Pleomorphic Adenoma by using **Electrocauterv**

Bülent Kahraman, Ali Ekemen, Orkhan Ismayilov, Burak Mahir Maho, Hakan Alpay Karasu Ankara University, Faculty of Dentistry, Oral and Maxillofacial Surgey Department, Ankara, TURKEY

Objective: Pleomorphic adenomas account for the majority salivary neoplasm and most commonly occur in the superficial lobe of the parotid gland. They can involve the submandibular and minor salivary glands but rarely involve sublingual glands. The " pleomorphic " nature of the tumor can be explained on the basis of its epithelial and connective tissue origin. There tumors most commonly present in fourth to fifth decade of life. They are benign tumors but can recur, often in a multifocal pattern and be difficult to treat. These tumors may also be associated with malignant transformation.

Case: 46 years old male patient attended our clinic with the complaint of swelling at palate last 6 month. There was no fever, dysphagia or pain. Cervical lymph nodes was normal. Intra oral examination shows mass lesion on hard palate. After taking BT, we observe no destruction of palatal bone in this way we decided to local anesthesia for electrocautery excision of lesion. Following routine surgical preparation, patient was admitted to operation. Lesion excised widely and biopsy was performed. According to pathological examination lesion was defined as PA

Conclusion: Pleomorphic adenoma, though a common entity, is still a challenging tumor for surgeon. Its diverse histological and topographical property makes the tumor special. The examining clinician and treating surgeon must be aware of its recurrence, longevity, and malignant potential if incorrectly diagnosed or treated. In this case, we used electrocautery for better coagulation and we observe no recur for 2 years.

Keywords: Pleomorphic Adenoma, Eletrocautery, Follow-up, Excision

intraoparative view





preoperative view of lesion



removed lesion





PP-051 A Case Report: Diagnosis and Follow up of Rabdomyosarcoma

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Objective: Rhabdomyosarcoma is the most common soft tissue malignancy in children wich is mostly seen under 10 years old. World Health Organization (WHO) divides rhabdomyosarcomas into three main groups: embryonal, alveolar and pleomorphic. The most common embryonal type is observed in these groups and it is divided into two groups: botroid and spindle cell. the aim of this study is to pay attention to the embryonal type that seen in the head and neck region.

Case: A 9-year-old female patient with a complaint of facial pain for two months was admitted to our clinic with pain and swelling in the right posterior mandibular molar region. As a result of the clinical examination, the mass with lingual alignment of the posterior retromolar region was 22x22x12 mm, and the mass with painful mucosa and LAP of different color was detected with tonsil hypertrophy. Incisional biopsy was taken from the patient and directed to the pathology service. pathology results were reported as spindle cell malignant mesenchymal tumor. The patient was referred to ankara university medical school otorhinolaryngology services. The patient was operated under general anesthesia in the otorhinolaryngology service. the incision line was determined by the safe surgical margins in the mouth (0.5 cm). The mass was excised and separated for pathological examination. It was thick between grade 1 sarcoma and myofibroma.

Conclusion: PET was requested from the patient and as a result of this scan, 3-month followup was recommended for the patient.

Keywords: rabdomyosarcoma, myofibroma, embryonal tumor

after biopsy

before biopsy





PP-052 Stafne Bone Cavity: A Case Report

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Stafne bone cyst/cavity (SBC) defined by Edward stafne in 1942, is an asempthomatic radiolucent formation located in mandible lingual cortex, below the mandibular canal, between molar tooth and angulus; round and oval shaped, and has radioopaque and clear borders. Staphne bone cavity, which is often filled with salivary gland tissue, has rarely been reported to include striated muscle, fibrous connective tissue, and adipose tissue. In this case report, at routine examination of a 48 year old male patient carried out with panoromic radiography who has admitted to our faculty for prosthetic treatment, a radiolucent lesion was detected at the posterior region of patients right mandible next to tooth 48, below the mandibular canal, with no contact with tooth roots, lesion had sclerotic borders and oval shape and was verified with dental volumetric tomography and was case reported as a SBC.

Keywords: Stafne Bone Cavity, mandible lingual cortex, mandibular canal



Rehabilitation with All on Four Technique After Reconstruction of the Alveolar Bone which is Insufficient Vertical and Horizontal with Iliac Bone Graft

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Objective: the incompetency on alveolar bone might be originated congenitally or by reasons like trauma, tumor, kist, senility. The otogen grafts are accepted as gold standart to recompanse these incompetencies. Hybrid prostheses such as all on four procedure, full-mouth porcelain restorations or overdenture can be used by using dental implants in edentulous patients. In this case presentation the rehabilitation with all four procedure after reconstruction with iliac bone graft is presented for a edentulous patient who has alveolar incompetency.

Case: 45 year old woman patient applied our clinic for edentanation. Seriously alveolar incompetency has been determined after clinic and radiologic treatments. The augmentation of maxilla and mandibula with iliac bone graft has been planned as a preliminary for dental implant surgery. The patient has been taken to Operation after routine operational arrangements. Horizontal and vertical bone augmentation was done with iliac bone graft. Seven pieces dental implant to maxilla and 4 pieces to mandibula was practised following osseointegration of bone graft. All on four procedure was planned for mandible while full mouth porcelain restoration was being planned for maxilla.

Conclusion: No complication was determined in jaws or donor zones after iliac bone graft surgery. Significantly horizontally and vertically bone increase was observed on both maxilla and mandibula. Immediate loading could not be done in all on four because immediate loading was not endicated on the implants on maxiller zone. The completion of prosthetic restorations has been planned after osseointegration of dental implants.

Keywords: all on four, iliac bone graft, otogen graft

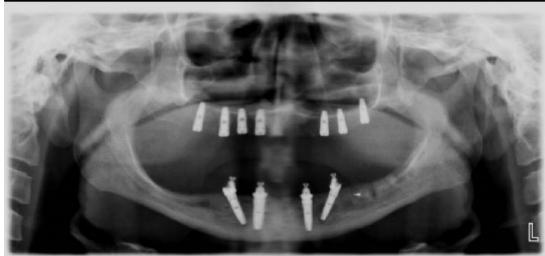
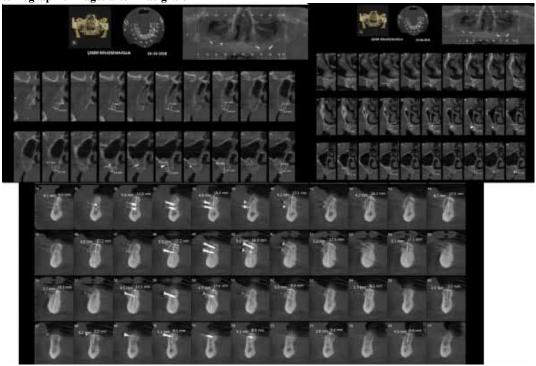


image after implant surgery





tomographic images after iliac graft





PP-054 Osteomyelitis After Dental Implant Treatment: A Case Report

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Osteomyelitis of the mandible or maxilla is an uncommon disease in the modern oral and maxillo-facial surgery practice. Osteomyelitis of the mandible or maxilla is a multifactorial disease caused by several etiologic factors, such as radiation, trauma, and certain chemical substances. It is an infection caused mainly by pyogenic microorganisms spreading rapidly into the Haversian system. It usually affects patients with systemic conditions, such as diabetes mellitus, malnutrition, malignancy, or immune deficiency. The infection is usually polymicrobial. Pathological lesions developing around the dental implants are usually inflammatory lesions due to bacteriaaccumulation on the surface of the dental implant. In 1993, Sussman and Moss reported for the first time a case of localized osteomyelitis in the anterior mandible secondary to implant placement. There are many possible sources of infection during dental implant insertion, including the surgical instruments, saliva in the oral cavity and the perioral skin pathogens. Untreated infected periimplantitis could cause an accumulation of several types of odontogenic bacteria in the lesion, biofilm formation and massive bone resorption, which could eventually cause true osteomyelitis. In this presentation, patient was referred to our clinic with the finding of infection following implant treatment in another clinic. The patient had parasthesia in the left alveolar inferior nerve. Biopsy was performed with the preliminary diagnosis of osteomyelitis. Pathological evaluation confirmed the diagnosis. One of the implants was removed after using antibiotic and local debridement. During the routine follow-up of the patient, new bone formation was observed in the radiolucent area around the implant.

Keywords: Implant, Osteomyelitis, Parasthesia



PP-055 Benign Fibroosseous Lesion in The Mandible: A case report

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Objective: Benign fibroosseous lesions (BFOL) are intraocular lesions including calcified structures such as bone or cement. Fibrous dysplasia, osseous dysplasia (cemento-osseous dysplasia) and fibroosseous tumors (ossifying fibroma) are in the benign fibroosseous lesions group. Ossifying fibroma is a benign fibroosseous lesion (FOL), which is commonly found in the mandible. Radiographically mixed (RO / RL) image.

Case: We report a 55-year-old woman who presented to our clinic with complaints of numbness in her left lower jaw. Radiological examination revealed a radiolucent border surrounded by radiopaque lesion in the left mandibular corpus. CT examination was seen that the lesion was surrounded by mandibular canal and was narrowed the mandibular canal. The lesion and the affected nerve region were excised by excisional biopsy. The pathology result was a benign fibroosseous lesion (BFOL). At the third month, improvement and new bone formation were observed at the relevant site. She had permanent nerve damage in the mental area. No signs of infection were found.

Conclusion: Ossifying fibroma is a benign fibro-osseoz lesion that are thought to result from the periodontal ligament, and include varying amounts of fibrous tissue and bone. Ossifying fibroma is more common in mandible and women sex. Because of well-demarcated of tumor, conservative surgical approach was performed.

Keywords: Fibro-osseoz lesion, Mandible, Ossifying Fibroma



Non-invasive Treatment of Dislocated Condyle Fracture Together Parasymphysis Fracture: Case Report

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Objective: Mandibular fractures from the facial region of the chin are occured in 4th position. The condyle fracture of mandibular fractures is in the 3rd occur with a percentage of 21.1%. Treatment options for condyle fractures are open reduction and internal fixation or closed (conservative) treatment. Open reduction and internal fixation are preferred in condyle fractures with angulations exceeding 45 degrees.

Case: A 25-year-old male patient was admitted to Karadeniz Technical University Faculty of Dentistry. Radiographs and clinical examination revealed subcondillary fractures in the left condyle area and multiple fractures and parasymphysis fractures in the symphysis region. In his history, it was learned that the accident occurred 1 month ago and the patient>s surgical treatment continued in the other departments. Due to these reasons, the patient could not be treated with open reduction and internal fixation.

Conclusion: In this study, non-invasive treatment of the patient who had a condyle fracture more than 45 degrees was dislocated and the post-treatment evaluation was indicated.

Keywords: condyle fracture, mandibular fracture, Open reduction and internal fixation or closed treatment



PP-057 Ankyloglossia: Case Report

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Objective: Ankyloglossia is characterised by a short and fibrosed lingual frenulum which may result in reduce of tongue movement and thus impact on phonation.

Case: A 21-year-old female patient admitted to the maxillofacial department with the complaint that she could not express her language freely and having a lisp. In the clinical examination, it was seen that lingual frenulum was terminated in the lingual of the crest by starting from the apex of the tongue. The treatment involved is surgical removal of the lingual frenulum to functionally rehabilitate the tongue. Firstly, lingual infiltration anesthesia was performed on both sides of the frenulum. A hemostat was used to clamp frenulum. Afterwards two horizontal incisions were made at frenulum, one below the hemostat and one upper the hemostat. Subsequently, blunt dissection was performed from the surrounding tissues to separate the tongue from the surrounding tissues. There was no serious bleeding focus. It was seen that the patient was able to remove his tongue comfortably from the profile after surgery.

Conclusion: Due to the limitation of movement of the tongue, patients can not pronounce comfortable. Also lingual frenulum causes diastema formation in the lower incisor teeth and gingival recession. Therefore patients with ankiloglossia should be performed lingual frenectomy.

Keywords: Ankyloglossia, Frenulum, Tongue



Brown Tumors: Is surgery first or biochemical test?

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Objective: Brown tumors, also known as osteitis fibrosa cystica are giant cell lesions of the jaws associated with hyperparathyroidism. It represents a reparative cellular process, rather than a neoplastic process. The aim of this report was to present of medical management of a patient with multiple brown tumors which were healed spontaneously after parathyroidectomy.

Case: A 22-year-old male patient referred to our hospital for routine dental examination. Multiple cystic lesions were observed in maxilla and mandible in panoramic radiograph and for detailed examination, cone beam computed tomography was taken. Well-demarcated, unilocular, tumoral lesions were seen in right maxilla, bilateral retromolar regions and left premolar region of the mandible with expansion and bone destruction. It was suspected as brown tumors, biochemical blood test was performed. Parathormone (PTH) level was 1445 pg/ml and alkaline phosphatase (ALP) level was 279 u/l in biochemical tests. Serum calcium (Ca) level was extremely high (13,96 mg/dl),so patient was hospitalized by endocrinology department and biopsy of the lesions did not performed because of the risk of cardiac arrest. Parathyroidectomy was performed by general surgery department and patient was discharged after successful endocrinal therapy. After one year follow up, all lesions in both jaws were healed and calcification of the lesions was observed in radiographic examination.

Conclusion: Brown tumors can healed spontaneously after successful endocrinal treatment and maxillofacial surgeons should be aware of serum Ca levels before any surgical intervention such as biopsy because of high cardiac mortality associated with high serum Ca levels.

Keywords: hyperparathyroidism, Brown Tumor, Maxilla, Mandible



PP-059 Orocutaneous Fistula and Surgical Treatment: A Case Report

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Objective: Orocutaneous fistulas are usually caused by dental causes and rarely seen. The cause of orocutaneous fistula should be well investigated and removed from the factor, otherwise it may occur in recurrent fistulas. Extraoral odontogenic fistula in the face and neck is normally a result of a long-lasting chronic infection due to a decay and infected tooth, trauma, curettage after a extracted tooth with a periapical lesion, or a periodontal infection. This case report describes the surgical treatment of orocutaneous fistula in a 69 year old male patient.

Case: A 69 year old man was admitted to Inonu University Faculty of Dentistry Department of Oral and Maxillofacial Surgery due to fistula path at the tip of the jaw. Radiographic, intra oral and extra oral examination revealed a fistula between the mandibular anterior alveolar ridge at the tip of the lower jaw. It was learned that the fistula path was present for about 3 years and occurred after extracted the incision of the tooth in the anterior region. The fistula was surgically excised by blunt dissection and the region was primary sutured both inside and outside the mouth. Sutures were removed 1 week later and recovery was uneventful. Subsequent follow-up of the patient showed complete improvement.

Conclusion: Any orocutaneous fistula pathway involving the face, dental causes should be considered. Clinical and radiographic dental examinations and anamnesis from the patient provide clear information about the cause of orocutaneous fistula. As a treatment option, complete removal of the fistula path by surgical dissection and closure of the region with suture are successful.

Keywords: chronic infection, orocutaneous fistula, surgical treatment



PP-060 Oral Mukocele: A Case Report

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Objective: Mucocele is a common lesion of the oral mucosa resulting in a change of small salivary glands due to mucus accumulation. The mucoceles are classified in two ways as extravasation and retention. The most common site of extravasation mucocele is the lower lip and the cause is often considered to be a trauma. Mucoceles can be seen in all ages and sexes, but they occur in younger males. In this case report, we describe the successful treatment of mucocele in a 19 year old male patient.

Case: A 19 year old male patient was admitted to Inonu University Faculty of Dentistry Oral and Maxillofacial Surgery Department with a slow and painless swelling on his lower lip. In the oral examination, a well-demarcated oval shaped swelling was observed on the lower lip. The mucosal surface was smooth and the lesion was close to blue. The surrounding mucosa was normal. The palpation was soft, fluctuated and flicked to the underlying tissue. The lesion was surgically excised and the region was primary sutured. Tissue samples were sent to histopathological examination. Histopathological findings revealed mucocele. No recurrence was observed in the subsequent follow-up of the patient.

Conclusion: The treatment of mucocele involves surgical excision of the respective gland. Other treatment options include laser ablation, cryotherapy and corticosteroid administration. Surgical excision is a treatment with low recurrence rate and good prognosis.

Keywords: mukocele, salivary glands, surgical treatment



Treatment of A Large Dentigerous Cyst in The Mandible: A Case Report

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Objective: Dentigerous cysts are benign odontojenic cysts that are associated with the crowns of an unerupted impacted tooth. Many dentigerous cysts are treated with enucleation and the extraction associated teeth. Large volume cysts can treated with decompression. The chance of recurrence following complete removal is very low. In this case, enucleation treatment of dentigerous cyst and related tooth extraction is presented.

Case: A 56 years old male patient applied to the Department of Oral and Maxillofacial Surgery at İnönü University Dentistry Faculty with a slowly growing, painless swelling in the mandibular ramus. The patient was requested CT determine the lesion borders in mandible. CT scan revealed a 4,5 cm x 2,5 cm size lesion in the left mandibular ramus. The lesion was learned to be dentigerous cyst after incisional biopsy. Then, the third molar tooth extraction and the enucleation of the cyst were performed. The patient was treated with enucleation in case, recurrence wasn't observed at follow-up for 14 months.

Conclusion: Dentigerous cysts can be treated with enucleation or enucleation after marsupialization. Enucleation of large lesions brings with surgical difficulties With decompression, the pressure inside the cyst is reduced and the size of the cyst can be reduced. Reduced cysts are removed from important anatomical formations and their enucleation becomes easier. In this case, we prefer enucleation instead of decompression because the embedded tooth is too deep.

Keywords: dentigerous cyst, enucleation, impacted tooth



PP-062 Compound odontoma with number of denticles: Report of 3 Cases

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Objective: Odontomas are mixed odontogenic tumours in which both the epithelial and mesenchymal components undergo differentiation and form enamel and dentin. Odontomas most common odontogenic tumors and rather than a real neoplazia as accepted developmental anomalies. WHO is classified odontomas as compound and complex. Compound odontoma is a malformation in which all dental tissue more than regularly againist the complex odontoma. Odontomas can be seen all dental arch but they are most commonly diagnose anterior maxilla and posterior mandible. They are asemptomatic and growth slowly and they are not agressive character. Odontomas is not completely known, local trauma, infection, heredity and genetic mutation must be effective. Odontomas are treated by conservative surgical removal and there is little probability of recurrence.

Case: Three patients, 24 and 22 years of age, applied to the Faculty of Dentistry faculty of İnönü University for routine control. Intraoral and radiological examinations of the patients revealed intraosseous radiopaque lesions. In this case series are presented compound odontomas treatment include number of denticles.

Conclusion: Odontomas's etiology haven't been known totally but presented an opinion is that trauma infection, heritage and genetic can be efficent. Odontomas generally diagnose second decade of life. According to literature, the treatment of odontoma is surgical removal along with complete excision of any affiliated soft tissues because there is a risk of odontoma interfering with eruption of the permanent tooth, displacement of the adjacent teeth and give rise to dentigerous cysts.

Keywords: compound odontoma, denticles, odontoma, odontogenic tumors



PP-063 Treatment of peripheral giant cell granuloma: 2 cases report

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Objective: The Peripheral Giant Cell Granuloma(PGCG) is a reactive, exophytic lesion that occurs primarily in gingival tissue and alveolar mucosa. PGCG originating from the periosteum or periodontal membrane, usually as a result of local irritating factors after tooth extraction, poor dental restorations, food impaction, plaque, and calculus. Histological examination reveals that the lesion with numerous fibroblastic cells and multinuclear giant cells surrounded hemorrhagic areas. The PGCG is a soft tissue lesion but it can affect the bone. It is most seen between the age of 40 to 60. This case report describes the treatment of peripheral giant cell granulomas in two male patients admitted to our clinic.

Case: Two 55 and 58 year old male patients were admitted to the Department of Oral and Maxillofacial Surgery in Inonu University Faculty of Dentistry with the complaint of swelling and bleeding in the gums. Mouth examination revealed bright red purple tumoral tissues greater than 1 cm in gingiva. Mobility, periodontal destruction and dense plaque were observed in the relevant teeth. Histological examination of the excised lesions revealed peripheral giant cell granuloma.

Conclusion: Treatment of peripheral giant cell granulomas is complete surgical excision and removal of the etiologic factors from the bone surface of the mass. If surgical excision is made superficial, the likelihood of recurrence is increased. Most of all bone walls after excision it is sufficient for the desired improvement. In cases with periodontal ligament involvement, it may be necessary to draw the tooth.

Keywords: curettage, granuloma, giant cell, periosteum



Surgical treatment in Bronj patient: A case report

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Objective: Bisphosphonate related osteonecrosis of the jaw (BRONJ) is defined as the presence of necrotic bone that lasts more than 8 weeks in the oral cavity of an individual subject to bisphosphonate treatment without a history of head and neck radiation. Dentoalveolar surgery, including dental extractions, and the use of dentures are considered the most common local factors associated with risk of BRONJ.

Case: A 74-year-old male patient with a history of prostate cancer and IV zoledronic acid applied to the Department of Oral and Maxillofacial Surgery at the Faculty of Dentistry of Malatya Inonu University. Intraoral examination revealed necrotic bone areas with bad breath, pus discharge. Osteonecrosis was observed in the upper right posterior maxilla and lower left posterior mandible. The patient recently stated that tooth extraction was performed at the external center at the relevant sites. In this presentation, we defined the treatment procedures.

Conclusion: In the last decade tooth extraction was recognized as the main risk factor for precipitating BRONJ. In general, a thorough dental examination is recommended, and if necessary dental treatment is completed before starting bisphosphonates. However, patients were usually late for referral to oral surgery as most of them had stage II or stage III BRONJ at presentation. This would easily be reduced if dental consultations start playing a role in the care pathway of all oncology patients.

Keywords: bisphosphonate, BRONJ, osteonecrosis, prostate cancer



PP-065 Myositis Ossificans: A Rare Case Report

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Objective: Myositis ossificans is a benign pathology known as ossification in muscle and soft tissues. There are three types of traumatic, non-traumatic and congenital. The most common type is the traumatic. It develops after direct trauma to muscle tissue, extensive burns, fractures and joint dislocations. It is most commonly seen in the extremities and rarely seen in the maxillofacial region. Very few cases have been reported in the literature in the maxillofacial region, especially in temporal muscle.

Case: A 15-year-old female patient was admitted to the Department of Oral and Maxillofacial Surgery at the Faculty of Dentistry of İnönü University with the complaint of toothache and submandibular abscess. It was learned that the patient was followed up because of myositis ossificans disease in her anamnesis. There is a history of radiotherapy and chemotherapy due to the tumor in the arm. Oral and extraoral examination showed that the mouth opening was restricted. We>ve diagnosed stiffness in the jaw and facial muscles. In our clinic, the patient>s left mandibular first molar tooth was extracted. In this presentation, we present a female patient with maxillofacial muscles affected by rare myositis ossificans and the treatment procedures of this patient in our clinic.

Conclusion: Myositis ossificans are more common in males than females. It's most commonly seen in the extremities but rarely seen in the craniofacial skeleton. The most commonly affected muscles in this region are sternocleidomastoid muscle and masseter muscle. Although its treatment is not always satisfactory, physical therapy applications and surgical applications can be used if necessary.

Keywords: myositis ossificans, masseter muscle, tooth extraction



Nonsyndromic Odontogenic Keratocyst Treatment with Enucleation: A Case Report

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Objective: Odontogenic Keratocyst was categorized as a developmental, noniflammatory cyst of odontogenic origin with a potential of aggresive and infiltrative behavior. OKCs that arises from cell rests of dental lamina. It shows specific histopathological features and has a high recurrence rate. OKC 5-17% percent of all odontogenic jaw cysts. Generally adult patient and men are affected.

Case: The presented case was of a 72 years old man from Malatya, with a odontogenic keratocyst lesion of the mandible anterior region. The intraoral examination there was a expansion without hyperemia. The radiographic examination revealed multilocular radioulucency looks like soap bubble between left and right mandible canine teeth. During surgery, radical curetage was performed on the lesion site. Defect cavities was filled with PRF. Histopathologic examination show that the lesion was odontogenic keratocyst. Odontogenic keratocyst treatments options are decompression or marsupialisation, enucleation and marginal resection. We choosed enucleation and in this case due to defects margin far from anatomic vessel and nerve.

Conclusion: The term odontogenic keratocyst, first introduced by Philipsen (1956), can be clearly distinguished from other types of odontogenic cysts by the histogenesis and keratinized epithelial wall. Odontogenic keratocyst is a cystic lesion of odontogenic origin that demonstrates the behavioral characteristics of a benign neoplasm and has a propensity to recur after surgical treatment.

Keywords: odongenic keratocyst, enucleation, curettage



PP-067 Ectopic Supernumerary Tooth in Mandibular Ramus: Case Report

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Objective: Ectopic teeth are impacted in unusual positions or have been displaced and a distance from their usual anatomic location. The etiology of ectopic eruption is unclear.

Case: A-21-year-old male patient was admitted to our department with left lower third molar tooth pain. Left lower third molar tooth induced pericoronitis was found in clinical examination. As a result of radiographic examination, a cystic lesion with a border of 3.5 cm x 1.5 cm including the ectopic supernumerary tooth was detected in the left ramus surprisingly. Conebeam computed tomography was requested to better assess the limits of the lesion. Surgical removal of the ectopic tooth and cystic lesion under general anesthesia was planned. Excised formations were sent for microbiological and histopathological examination. There were no intraoperative or postoperative complications. The patient was discharged from the hospital the next day. The follow-up of the patient continues.

Conclusion: There are intraoral and extraoral approaches in the treatment of ectopic teeth with cystic formation. The intraoral surgical approach has advantages such as less complication, protection of the facial nerve, and no scarring of the skin.

Keywords: Cystic, Ectopic, Tooth



Foreign Material in Maxillary Sinus: A Case Report

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Case: Posterior maxillary teeth are generally in contact with the floor of maxillary sinus. There maybe a thin cortical bone or only sinusal mucosa in some people. Toothpick and plastic electricity cable is reported as foreign material in maxillary sinus. No similar case i found in the literature. In this case; we report the surgical operation technique for the removal of tooth pick and electricity cable dislocated to the sinus area through the tooth furcation and root canals of a 13 year old male.

Keywords: maxiller sinus, foreign material, tooth pick, electricity cable



PP-069 Stafne Bone Cyst in Rare Location

Nagehan Burcu Öğütcü Baskent University Konya Research and Application Center

Objective: Stafne bone cysts (SBC) are defined as pseudocysts of the jaw. In the literature, unlike posterior variant of SBC, anterior type of SBC (aSBC) is almost seven times less common (0.009%-0.3%). The aim of this report is to present a new case of aSBC and focuses on differential diagnosis along with alternative diagnostic imaging resources.

Case: A 68-year-old white man was referred to our clinic by his general dentist for consultation of the pain and radiolucent lesions on the left side of the anterior mandible. Palpation was performed on buccal and lingual area and no concavity or convexity was detected, it was totally asymptomatic. In extraoral examination, there was no asymmetry, expansion,lymphadenopathy and any change in skin appearance. The panoramic radiograph that was taken by his general dentist showed unilocular periapical radiolucency below the apex of the left mandibular canine and lateral teeth and the radiolucency had no relationship with the adjacent teeth. The lesion was seen at lingual cortex with well-defined border and extended towards the medulla of the bone in CT scan.Coronal and sagittal plane images showed some soft tissue invagination at the lingual cortical bone that located anterior of the mental foramen and below the canine apices without any relationship.

Conclusion: aSBCS is a rare entity and diagnosed randomly on radiographic examination. Its etiopathogenesis is still controversial. Dental professionals should be aware of this anatomic variation and differential diagnosis of SBCs and decide follow-up or treatment strategy according to diagnosis.

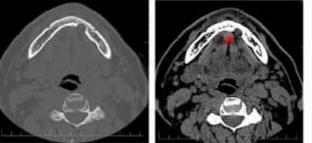
Keywords: Anterior, mandible, Stafne bone cyst

Fig.1



Initial panoramic radiograph shows unilocular periapical radiolucency below the apex of the left mandibular canine and lateral teeth.





a. CT images show the lesion with well-defined border and extended towards the medulla of the bone. b. In this slice sublingual gland tissue invagination to the lingual cortical bone can be seen.

Fig.3.



Coronal plane image shows lingual cavity.

Fig.4.



The one year follow-up panoramic radiograph shows no changes about the lesion dimension and the boundaries.



PP-070 Oral Soft-Tissue Burn Due to Local Alcohol Contact: A Case Report

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Objective: In this case report, burn lesions and treatment of oral mucosa of a patient who applied local alcohol (cologne cotton) in his mouth to relieve toothache are presented.

Case: A 70-year-old male patient had toothache which exacerbates for two days. The patient had applied a piece of colony cotton for several hours to the painful intraoral area to relieve his pain. Subsequently, the patient was admitted to our clinic with the complaint of severe pain and burning on his left cheek, lip and also edentulous area of the left maxillary canin-premolar region. On clinical examination, especially on the alveolar crest on the canine-premolar region, fibrin coated burn lesions which colored uneven white and containing red ulcers and surrounded with the erythematous areas and borders extending to lips in the left cheek area were observed. The patient was prescribed oral systemic corticosteroids and topical cystinosteroids in order to suppress the acute inflammatory period and oral analgesics to reduce the pain. In addition, the patient was advised to stay away from foods that could irritate the mucosa. One week later, patient was called for control and his ulcerated lesions regressed and the tissues returned to her previous state. Endodontic treatment was applied to the left upper lateral and left lower third molar teeth.

Conclusion: We achieved effective and successful results from the treatment of oral mucosal burns caused by ethyl alcohol with prevention of re-contamination by the lesions, symptomatic treatment, and endodontic treatment applied after to the teeth that the patient had pain.

Keywords: alcohol, local contact, oral mucosa, tissue burn



Treatment of Osteomyelitis After Mandibular Parasymphysis Fracture: A Case Report

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Objective: Mandibular fractures are common in maxillofacial trauma and ocur up to twice more than midface fractures. Infection after mandibular fracture is called post-traumatic osteomyelitis. The treatment of infected mandibular fractures immobilization with maxillomandibular fixation and/or splints, removal of diseased teeth in the fracture line, external fixation, use of antibiotics, debridement, and rigid internal fixation has played a role in management. In this case report; treatment of infection after mandibular fracture with open reduction and internal fixation was presented.

Case: 32 years old female patient was referred to Erciyes University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery with the complaint of pained and pus drainage below her lower jaw. In clinical examination there was extraoral fistula on her left parasymphysis are and occlusion was normal. In cone beam computed tomographic evaluation, a unilateral favourable left mandibular parasymphysis fracture was observed. The patient was treated under the general anesthesia with open reduction and 2.0- mm locking reconstruction plate was inserted after the debridement of infected bone fragments intraorally. An eventful healing was observed without any complication in three months follow up.

Conclusion: Various methods are used to treat symphysis/parasymphysis fractures such as reconstruction bone plates, double or single miniplates. Load sharing systems can be used in simple parasymphysis and stable enough to prevent interfragmentary motion. However, load bearing systems are satisfactory methods for the treatment of complicated and infected fractures.

Keywords: fracture, mandible, osteomyelitis



PP-072 Fibrous Dysplasia with Maxillary Sinus Involvement: Two Case Reports

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Fibrous dysplasia is a condition in which normal bone marrow is replaced by an abnormal proliferation of new fibrous connective tissue. Underlying pathology for non-malignant condition is post-zygotic, activating mutations of the GNAS gene that results in inhibition of the differentiation and proliferation of bone-forming stromal cells like osteoblasts and adipocytes, and leads to the replacement of normal bone and marrow by fibrous tissue and woven bone. FD can affect one bone (monostotic form) or multiple bones (polystotic form), also can be linked with skin or endocrine system, and named as McCune-Albright syndrome. FD lesions mainly occur in the first 5 years of life and can expand during following decades, or lesions can remain "silent" till asymmetry or growth occurs. Patients with FD usually complain about slowly growing facial swelling that effect the facial appearance or loosening the denture balance due to jaw growth. In FD cases that body spaces like maxillary sinus affected, symptoms can occurs lately and final diagnosis can be late. FD is usually asymptomatic unless pain due to secondary infection or expansion attracts attention to the lesion.

There is no definitive treatment for fibrous dysplasia. Symptomatic treatments are applied according to the patient's complaint including facial/alveolar countering and/or gingival resection surgeries.

The aim of this paper is to present diagnosis and treatment modalities of 2 FD patients that involved maxillary sinuses.

Keywords: Alveoloplasty, Fibrous Dysplasia, Maxillary Sinus



Extraction of İmpacted Mandibular Third Molar Associated With a Dentigerous Cyst. A Case Report

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Objective: Dentigerous cysts; These are benign lesions that are observed in jaws, developmental in the teeth or as a result of inflammation. These pathological formations are usually embedded or it is related to the crown of a tooth that is still in progress. Clinically, these lesions grow asymptomatically. Dentigerous cysts can cause many complications such as pain, paresthesia, resorption and tooth migration. Treatment approach in dentigerous cysts, usually marsupialization and enuclation. However, childhood in the treatment of lesions observed in of the tissues and especially of the permanent teeth conservation has been prioritized.

Case: A 28-year-old male patient presented to our clinic with complaints of numbness in the right lip and pain in the right mandibular posterior region. Intraoral examination revealed swelling of the vestibular mucosa. Radiological examinations revealed a impact third molar tooth and a radiolucent area with good bone margins. Nervus alveolar inferior and buccal block anesthesia was applied to the patient. Full thickness mucoperiostal flap removed. Access to the cyst cavity using bone motors Cyst enucleation and recessed 3. molar tooth were extracted.

After irrigating the relevant area, sharp bone lesions were corrected.

Flap was primary sutured. He was sent to the pathology center for mass biopsy, The diagnosis of dentigerous cyst was determined.

Conclusion: Dentigerous cysts are frequent in the second and third decade odontogenic lesions of origin. In the literature, with dentigerous cysts together with radicular cysts It has been reported that the. lesions can become infected and give symptoms such as pain and swelling.

Keywords: Cyst, dentigerosus cyst, third molar



Approach to the Complex Patient with Autoimmune Diseases, Pregnancy and Severe Dental Abscess

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Objective: Rheumatoid arthritis (RA) and systemic lupus erythematosus(SLE) which are autoimmune connective tissue disease. A dose-dependent cortisone protocol should be performed due to corticosteroid usage. At the same time; because of the suppression of the immune system, patients become more susceptible to infections. The aim of this report is to present the treatment of a pregnant patient with autoimmune disease and buccal abscess.

Case: 25 years old female patient was referred to Ercives University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery with the complaint of her facials welling, fever, and weakness. In clinical examination there was left buccal space abscess caused by decayed first maxillary molar. She had SLE, RA, and cranial involvement of romatological diseases. She was 6 weeks pregnant and the patient had using corticosteroid (daily 5 mg) and acetylsalicylic acid. Radiographic examination could not perform due to pregnancy. The patient was consultated to obstetrics and internal medicine department. She was hospitalized and ampicillin-sulbactam and paracetamol were applied for dental infection according to obstetrician consultation. After acute infection was controlled, tooth extraction and abscess drainage was performed. She was discharged at the end of 2 days.

Conclusion: It is difficult to treat of severe dental abscess in complicated patients. These patients need multidisciplinary approaches and hospitalised in fully equipped hospitals for adequate management.

Keywords: abscess, autoimmune disease, pregnancy



PP-075 An Odontogenic Cyst Mimicking Maxillary Sinus Tumor: Case Report

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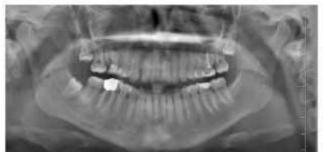
Objective: Odontogenic cysts are the most common pathologies in the maxillofacial region. The development and progression of these lesions are important for the diagnosis and treatment steps. In this case report, possible differential diagnosis and treatment process of a lesion that localized in the maxillary sinus were discussed.

Case: A 27-year-old woman was referred to our department with the complaint pain on her right posterior teeth and swelling on right half of her face in these days. CT revealed a mass filling and destroying the anterior wall of the right maxillary sinus. Additionally, maxillofacial MRI was performed and MRI revealed that the lesion filled whole right maxillary sinus, and was lying under the skin at the superior border. All these findings indicated that the patient had a lytic, progressive lesion. The differential diagnosis of the lesion focused on mucocele, serous cyst, sinonasal papilloma, inverted papilloma, angiofibroma, odontogenic keratocyst, ameloblastoma, radicular cyst, odontogenic myxoma, solitary myofibroma, Wegener's granulomatosis, Aspergillosis, and cholesteatoma. The patient was treated under general anesthesia. The lesion was totally enucleated with functional endoscopic sinus surgery (FESS) and the intraoral approach simultaneously with tooth extraction. The oroantral communication was closed by the buccal fat pad. histopathological examination revealed that the lesion was radicular cyst. At the 1-year follow-up, no signs of recurrence or oroantral fistula were found.

Conclusion: Considering the main clinical findings of these pathologies and age or gender groups that specific to pathologies are important factors for correct clinical diagnosis and treatment.

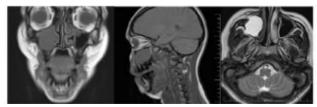
Keywords: Maxillary sinus, odontogenic cyst, pathology

Figure 1



Initial panoramic radiograph of the patient.

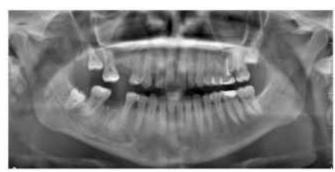
Figure 2



MR imaging shows the boundaries of the mass filling the maxillary sinus.



Figure 3



A year after the control panoramic radiograph has show a good improvement of the alveolar crest in the process site.



A Dental Implant In The Maxillary Sinus As A Foreign Body: A Case Report

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Objective: In the last two decades implant surgeries and related techniques have gained wide acceptance in dentistry clinics. As popularity increases, the complication rates also have begun to rise. In this case report, we aim to present the displacement of a dental implant into the right maxillary sinus which was placed without sinus floor elevation, on a vertically inadequate bone height.

Case: A 41 years old systematically healthy patient was referred to our clinic after implant surgery. The patient was complaining of implant displacement into the right maxillary sinus after the placement. The patient was consulted with otorhinolaryngology department for sinusoidal diseases. There was not any other sinus pathology so, an intervention thorough alveolar crest was planned. But, the second radiography revealed that the implant migrated in sinus to a posterior aspect with an inverted position. Hence, the lateral window approach was preferred. The implant was removed and the surgical site was covered with collagen membrane and primarily sutured. On the follow-up period, the site was healed uneventfully.

Conclusion: Working near sinus like anatomic structures has risks of displacement, migration and perforation.

Due to perforation the most significant co-morbidities are chronic sinusitis, nasal polyps, even pansinusitis, panophthalmitis.

To remove the foreign bodies, lateral window technique has advantages like the direct view, preservation of alveolar bone, able to prepare pedicled bone lid. In conclusion, foreign bodies should always be removed to avoid the occurrence of sinus complications related to blockage of the mucociliary pathway and the occurrence of inflammation.

Keywords: Dental İmplants, Dental Materials, Displacement, Foreign Body, Maxillary Sinus



Safe Surgical Treatment of a Dentigerous Cyst: Enucleation following Decompression

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Objective: In this case report, the success of the enucleation protocol, which was performed following the decompression via fenestration of the large dentigerous cyst in the right posterior region of the mandibula, was presented.

Case: A 62-year-old male patient presented to our clinic with idiopathic pain and pus flow in the right area. Clinical examination revealed swelling in the right molar region vestibular sulcus. In the radiological examination with orthopantomograph and cone beam computed tomography, the third molar tooth embedded in the right angulus and the cyst that developed around it were seen with proper borders. Due to its proximity to the n.alveaolaris inferior of the cyst epithelium, it was decided to enucleate after decopression. After 3 months of decompression therapy, the cystic enlargement was observed in the radiograph. The retracted cyst was enucleated under local anesthesia. In addition, the third molar tooth that caused cyst development and the first molar tooth in relation to the cyst were extracted. Histopathological examination was performed after biopsy and enucleation before decompression and was compatible with dentigerous cyst. On the 6 months follow-up of the patient did not show any complication.

Conclusion: In large cysts that develop in the posterior region of the mandible, we recommend the application of enucleation followed by decompression followed by anatomical structures of the cyst, the difficulty of reconstruction of the lost bone structure and the risk of postoperative infection.

Keywords: cyst, decompression, dentigerous, enucleation, safe surgery



A Great Multilocular Traumatic Bone Cyst

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Objective: Traumatic bone cyst is a lesion seen in the proximal parts of long bones and mostly in young individuals. Mandibular corpus and ramus are the most affected areas in the jaw and face region. The most common period is the second term. Patients usually have a trauma history. The lesion does not affect the vitality of the teeth. In this case report, surgical treatment of traumatic bone cyst in the posterior region of the mandible is presented.

Case: A 16-year-old female patient who were referred to Oral and Maxillofacial Surgery Clinic as a result of radiological examination; multilocular radiolucent lesion was detected in the mandibular corpus region. The vitalities of the teeth were checked and were vital. The cystic cavity was reached by opening the window cavities in 2 regions where the surface of the bone was removed. The cyst cavity was completely curetted and the cavity was filled with blood. The radiological examination performed 4 months later revealed that the cyst cavity was filling with new bone.

Conclusion: Actually, the term traumatic bone cyst is a misnomer because it does not contain epithelium. It can be called idiopathic bone cavity. In this case, the probable etiological cause is the trauma of the patient at a young age. The classic findings are that the epithelium is absent and the wall of the cavity is histologically surrounded by normal bones. The most common treatment for traumatic bone cyst is curettage. In the treatment of traumatic bone cyst, the cyst opens surgically. Inside the cavity is filled with blood and the blood is resorbed and healthy new bone tissue is formed.

Keywords: Simple bone cyst, solitary bone cyst, traumatic bone cyst



Large Dentigerous Cyst Associated with Ectopic Canine of the Maxilla:A Case Report

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Objective: Dentigerous cysts are the second most common odontogenic cysts affecting the jaw bone that are associated with the crowns of permanent unerrupted teeth; usually single in occurrence and located in the mandible. Dentigerous cysts remain asymptomatic and are usually diagnosed incidentally during the routine radiological examination. In this report, large dentigerous cyst associated with the mandibular canal and surgical treatment are presented.

Case: A 30-year-old female patient suffering from swelling of the right maxillary canine region with dull pain was referred to our department. The diagnosis of dentigerous cyst was confirmed with clinic, radiographic and histopathologic findings. Dentigerous cyst was enucleated and the associated impacted teeth extracted under local anesthesia. The patient tolerated the procedure well. Sutures were removed on the seventh day after operation and the postoperative course was uneventful.

Conclusion: Dentigerous cysts may cause symptom free large bone defects. It is therefore important to perform radiographic examination of all unerupted teeth.

Keywords: Dentigerous cyst, Maxillary, Odontogenic cyst, Enucleation



intraoperative photograph





intraoperative photograph



intraoperative photograph



intraoperative photograph







Postoperative Panoramic radiograph



L

postoperative photograph(1 weeks)



Preoperative Panoramic radiograph





Reduction of bone fragments with gray intravenous catheter guidance in displaced low-condylar neck fractures: An alternative tool usage

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Objective: One of the recommended surgical approaches for displaced low-condylar neck fractures is the retromandibular approach. Mandibular ramus must often be pulled down to provide for the reduction of displaced bone fragments. However, in retromandibular approach, it is often not possible to perform this maneuver. In this technical note, a recommendation has been described which facilitates the pulling of the mandibular ramus during the retromandibular approach.

Technique: After exposing the mandibular ramus and condyle by retromandibular approach, bicortical screws are inserted into mandibular angulus region considering to the N. alveolaris inferior. A 16-gauge grey intravenous cannula is inserted underneath the mandibular angulus and advanced into the region of the screw. The needle in the cannula is pulled out after reaching the area. 0.5mm stainless steel wire is passed through the cannula and connected to the screw. Mandible can be easily positioned downward using this approach.

Discussion: Ellis and Zide previously applied this method using an 18 gauge needle. In this method, after the needle is reached through the surgical area, wire is inserted through the needle hole, connected to the screw and the needle is withdrawn. Although the method we describe is the same as Ellis>s method, it is recommended to use intravenous cannula as an alternative material. The manipulation of the intravenous cannula can be easier. In addition, the plastic frame around the cannula prevents the wire from damaging the soft tissue and the branches of the facial nerve during the pull-down of the mandible along with the wire.

Keywords: condylar fractures, retromandibular approac, Reduction of bone fragments



Extraction of Multiple Impacted Teeth Developed in Half of Maxilla and Repair of the Defect via Platelet-Rich Fibrin: A Case Report

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Objective: Although the impacted permanent canine and premolar teeth remain relatively, unilateral multiple impacted teeth remain in the same arch rarely. In this case report, we present multiple impacted teeth (maxillary right canine, the first premolar, the second premolar), the persistent deciduous tooth with their extractions and the repair of the defect succesfully via platelet-rich fibrin (PRF).

Case: A 30-year-old male patient was admitted to Bolu Abant Izzet Baysal University Department of Oral and Maxillofacial Surgery with the complaints of pain in the right area and halitosis. The patient's clinical and radiological examination revealed a persistant milk tooth with a decay, and the impacted right upper maxillary canine, impacted first premolar and impacted second premolar teeth in the right posterior region of the maxilla together. The patient was offered orthodontic treatment or autogenous bone grafting treatment, but the patient refused. The above-mentioned teeth were extracted under local anesthesia. PRF was applied to the defect for improving the quality of healing tissue and faster recovery. During the sixth month follow-up, intraoral recovery was satisfactory.

Conclusion: Surgeons should apply the most appropriate treatment taking into account the patient's wishes and treatment expectations. In this study, PRF was used to accelerate the healing of problems and soft tissues in the defect area and a successful result was obtained.

Keywords: deciduous, extraction, impacted teeth, platelet rich fibrin, tooth



Ectopic Molar Teeth In Maxillary Sinus: Two Case Reports

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Objective: Ectopic teeth are defined as the teeth that erupt outside of the alveolar arch or impacted in different locations. The incidence of ectopic teeth varies between 0,1-1%. It is thought to be caused by developmental disorders, infection, trauma and idiopathic factors. Mandibular condyle, coronoid, nasal cavity, hard palate and maxillary sinus are the most common anatomical regions in which ectopic teeth are seen. In this case report, two ectopic teeth located in the maxillary sinus are presented.

Case:

Case 1: A 47-year-old female patient was referred from the Department of Oral Diagnosis and Radiology after routine clinical and radiographic examination. Panoramic radiography revealed an ectopic molar tooth located in the left maxillary sinus. Ectopic molar tooth extraction was performed under local anesthesia. No complications were observed in the postoperative period. Case 2: A 44-year-old female patient was referred to the clinic with pain in right maxillary molar region. In the clinical and radiographic examinations, the ectopic first molar tooth in maxillary sinus was observed. Ectopic molar tooth extraction was performed under local anesthesia. No complications were observed under local anesthesia. No complications were observed in the postoperative period.

Conclusion: The presence of ectopic teeth in the maxillary sinus is a rare condition and is often detected during routine radiographic examination. It has been reported that ectopic teeth in the maxillary sinus cause obstruction of the osteomeatal complex and chronic sinusitis. It is also known that it may cause symptoms such as facial and headache, nasal congestion, olfactory disorders and epiphora.

Keywords: Ectopic teeth, maxillary sinus, tooth eruption



Peripheral Giant Cell Granuloma: A Case Report

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Objective: The peripheral giant cell granuloma (PGCG) is a reactive lesion occurring on the jaws. It is mostly caused by local irritating factors such as worse dental restoration, plaque, calculus, poor removable partial denture, scanty oral hygiene. PGCG is mostly take place in the anterior of the mandible. It is usually seen in between 40 and 60 years of age. PGCG is more common in women. In this report a 45-year-old male patient's lesion, located on posterior of mandible premolar-molar region pathologically diagnosed as PGCG is presented with its treatment.

Case: A 45-year-old male patient came to our faculty with a complaint of inability to use his removable partial denture. It was associated with pain and difficulty in eating and speaking. In the radiologhicall examination, superficial erosion was observed on the alveolar bone. An intraoral examination showed a 15-10-10 mm pedunculated, lobular soft tissue mass of his left posterior mandible gingiva. The lesion was excised down to the periosteum, under local anaesthesia. Histopathology confirmed the presence of PGCG.

Conclusion: In conclusion; these lesions should not be neglected. Patients which have PDHG should be long-term follow-up due to risk of relapse.

Keywords: Giant Cell Lesions, Mandible, Peripheral Giant Cell



Langerhans Cell Histiocytosis x presentation of a case and review of literature

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Langerhans cell histiocytosis, formerly known under a variety of different names such as histiocytosis X, eosinophilic granuloma, Hand-Schüller-Christian disease is a rare disease of the family of histiocytosis characterized by the accumulation of histiocytic cells in various tissues. The discovery of Birbeck granules in the histiocytes of this disease and the expression of similar antigens has led to the name Langerhans cell histiocytosis. However newer findings show that LCH origins from dendritic myeloid progenitor cells rather than Langerhans cells of the skin. Langerhans cell histiosytosis has a relatively higher incidence in children under the age of 15 years. The etiology of the disease is still unknown, and there has been considerable debate whether langerhans cell histiosytosis represents an inflammatory or a neoplastic disease. In this case report, a patient with right posterior mandibular pain who was admitted to our clinic and diagnosed with eosinophilic granuloma will be reported.

Keywords: langerhans cell histiocytosis, eozinophilic granuloma, pathology



Peripheral giant cell granuloma management and review of literature

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The peripheral giant cell granuloma, also known as a giant-cell epulis, giant-cell reparative granuloma, osteoclastoma, or giant-cell hyperplasia, is a reactive exophytic lesion of gingiva and alveolar ridge which originates from the periosteum or periodontal ligament. The lesion can develop at any age, though it is more common between the fifth and sixth decades of life, and shows a slight female predilection. Etiopathogenesis of this lesion is still unclear, but it is associated with local irritating factors such as tooth extraction, impacted food, poor dental restorations, calculus, plaque and chronic trauma. In this case we reported a 65 years old patient who presented to our clinic with a complaint of pain and a large red lesion of bleeding in the mouth. The lesion has bone involvement. The patient underwent exicional biopsy and the treatment process was reported.

Keywords: peripheral giant cell granuloma, pathology, reactive lesion



PP-086 Nasolabial Cyst: A Case Report

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Objective: Nasolabial cyst is relatively rare soft tissue lesion of nasal alar region. It is characterized by extra osseous location and nonodontogenic origin. Nasolabial cysts are more common in women than men. These lesions are usually, slowly growing painless mass which are more frequent on the left side. They are more common in the second and fifth decades. Nasolabial cysts do not present any finding on radiographs. The patients are mostly in the clinic with swelling in nasolabial sulcus, cyst may be infected. Nasal obstruction, upper elevation symptoms of the lip can be seen. In this report we have described a case of nasolabial cyst.

Case: A 24-year-old female patient without systemic disease presented to our department with swelling on the lower left side of her nose. In the patient's history, it was learned that the swelling developed four months ago. In the examination, the patient had a limited soft mass which was narrowed in front of the lower concha of the left nasal vestibule. No signs of inflammation or infection. Surgical excision of the nasolabial cyst was decided. Left gingivobuccal incision was performed. Blunt dissection was performed on the soft tissue. 1.5-1 cm mass removed.

Conclusion: Nasolabial cysts represent about 0.7% of all cysts in the maxillofacial region, and 2.5% of non-odontogenic cysts. This case has presented classic clinical features of nasolabial cyst. After conservative surgical excision, recurrence is rare.

Keywords: Cyst, Excision, Nasolabial Cyst



Management of the Zygomatico-Coronoid Ankylosis: A Case Report

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Objective: Mouth-opening limitation caused by fibrous or bony ankylosis between the mandibular coronoid process and the zygomatic bone is a rare disorder. Zygomatico-coronoid ankylosis also can be caused by a zygomatic complex fracture with or without concomitant coronoid process fracture, surgical complications, and intra-articular ankylosis extension. The purpose of this case report is to present on a case of zygomatico-coronoid ankylosis and increase awareness about this rare condition.

Case: A 45-year-old male was referred to our department with a painless, but progressively limited mouth opening. In history of the patient, the shrapnel fragment that is a result of the explosion passed from zygomatic arch to the infratemporal fossa 3 years before his referral. On physical examination, limitation of the mouth opening was 10 mm. Computed tomographic scans revealed a bone mass fusion between the zygomatic arch and the coronoid process on the right side without capsular involvement. Under general anesthesia, the right coronoid process was resected via intraoral approach. Ankylosed mass were removed, and the inner aspect of the zygomatic arch was smoothed. Mouth opening was increased to 30 mm postoperatively, and 34 mm 4 months after surgery.

Conclusion: Zygomatico-coronoid ankylosis may be misdiagnosed or overlooked. Therefore, surgeons should consider possibility of extra-articular ankylosis, particularly in cases in which no certain cause of TMJ disorder is evident and persistent trismus is present despite continuous physiotherapy and mouth-opening exercises, particularly in cases with a history of trauma. The ideal treatment of zygomatico-coronoid ankylosis is coronoidectomy and early postoperative mouth opening exercises.

Keywords: Coronoidectomy, TMJ, trismus, zygomaticocoronoid ankylosis



PP-088 Prediction of MRONJ risk in CBCT images

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Objective: Medication related osteonecrosis of jaws (MRONJ) is still an unsolved problem both in dental and medical areas. Prediction of the patients under risk of MRONJ could help both clinicians and the patients.

Materials-Methods: 50 consecutive patients of a surgeon between December 2015-March 2018 with the risk of MRONJ were evaluated.Clinical examinations included soft and hard tissue of oral cavity along with cervical lymph nodes and radiological features of bone sclerosis, bone sequestration, cortical surface irregularity, osteolytic changes, persistant extraction sockets and periostal response were also screened by CBCT. The clinical presentation, radiological features were correlated with the diagnosis and follow up of MRONJ suspected cases.

Results: Total of 50 patients (39 female and 11 male) with mean age 62,3 were evaluated. Mean duration of BP use was 3.09 years ranging between 2 months- 9 years. 38 patients were evaluated has the diagnosis of MRONJ (stage 1-3) whereas 12 patients were assessed before dental exractions and considered as either at risk of MRONJ or as Stage 0.

Conclusion: 38 patients were evaluated has the diagnosis of MRONJ (stage 1-3) whereas 12 patients were assessed before dental extractions and considered as either at risk of MRONJ or as Stage 0. 32 patients with sclerotic bony changes and 12 of them were regarded as at risk of MRONJ and these subjects needs to be closely monitored.

Keywords: MRONJ, CBCT, Risk of osteonecrosis



The Use of Platelet Rich Fibrin for Management of the Extraction Sockets in a Patient on Bisphosphonate Therapy

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Objective: The aim of this report was to present the management of wound healing in extraction sockets with platelet rich fibrin (PRF) in a 60 years old female patient on bisphosphonate therapy

Case: A 60 years old female patient applied to Van Yuzuncu Yil University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery with complaint of pain and tooth mobility. After clinical and radiographic evaluations 3 teeth in right mandible was planned to extract. Antibiotic, analgesic and antibacterial mouthwash were prescribed before the extraction. The teeth were extracted under local anesthesia, then PRF was placed into the extraction sockets and secured with 8 ligature sutures. Complete soft tissue healing was obtained in 5 weeks after the operation without any complication.

Conclusion: PRF can be applied after tooth extraction in patients on bisphosphonate therapy to prevent postoperative wound healing complications.

Keywords: Bisphosphonates, tooth extraction, prf



Keratocystic Odontogenic Tumor: A Case Report

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Objective: Keratocystic odontogenic tumors (KCOT's) and ameloblastomas are benign odontogenic tumors that primorly occur in the molar region of the mandible whose importance lies in its potential to grow into enormous size with resulting bone deformity. The most important clinical features of KCOTs and ameloblastomas are their potential for locally destructive behavior, recurrence rate, and their tendency to multiplicity when particularly coexistence with naevoid basal cell carcinoma syndrome. Previous reports that observed the occurrence of simultaneous odontogenic lesions or simultaneous odontogenic and non-odontogenic lesions, described combined lesions, sometimes called hybrid lesions.

Case: A 42 year old male was referred to our department with a complaint of pain. An orthopantomogram images showed large and well-defined multi-locular radiolucency associated with third molar in the left side of mandible. The patient evaluated with one of advanced imaging technics CBCT showed presence of a cyctic lesion.

Conclusion: Based on the clinical appearances and radiological findings of KCOTs, its differential diagnosis includes dentigerous cyst, lateral pertiodontalcyst, ameloblastoma, adenomatiododontogenic tumor, ameloblastic fibroma and central giant cell granuloma etc. However, histopathological analysis provides the most useful information for its proper diagnosis. Ameloblastomas and keratocystic odontogenic tumors are the major odontogenic tumors of the jaw and are associated with unerupted teeth.

Clinical and radiographic features of some cases can imitator each other and cause diagnostic dilemmas in arriving at a final diagnosis. Histopathological examination is a gold standard for the final diagnoses.

Keywords: Ameloblastoma, CBCT, Hybrid lesions, Keratocyctic odontogenic tumor



Mandibular Jaw Base Osteomyelitis With Trismus Secondary To Nasopharyngeal Cancer; Cbct Imaging Features At Initial Presentation

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Objective: Mandibular osteomyelitis is an inflammatory process of the bone that begins in the medullary space and with progression, extends to involve the cortical portion of the bone, the Haversian system, the periosteum, and the overlying soft tissue. Some chronic systemic diseases, immunosuppression and reduced vascularization make the individual susceptible to osteomyelitis development. The primary complaints are swelling, pain, fever, draining fistüle, malloclusion, trismus and exposed bone. In this case report, osteomyelitis causing severe trismus will be discussed both radiographic and clinical features with differential diagnosis.

Case: A 51 years old male patient referred to our clinic with the complaining of limitations mouth opening. The patient was diagnosed with nasopharyngeal cancer 10 years ago and received chemotherapy and radiotherapy. He had difficulty in mouth opening for 6 months. Extraoral examination revealed a fistula on the angulus of the right mandible. Intraoral examination revealed that the bone was exposed in many areas and there was pus flow in these areas. Panoramic radiographs showed radiolucent irregular bone areas in jaws. Cone-beam computed tomography (CBCT) was performed for three-dimensional images to evaluate all aspects.

Conclusion: Bone inflammatory diseases are important due to high morbidity and mortality rates. A correct diagnosis and treatment will improve patients> prognosis. Osteomyelitis, osteoradionecrosis and MRONJ may present with similar sign and symptoms but each represents a separate clinical disease and requires a different treatment approach.

Keywords: Cbct, Nasopharyngeal Cancer, Osteomyelitis



Unilateral Temporomandibular Joint Fibrous Ankylosis As Sequel of Bilateral Condylar And Symphysis Fracture

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Objective: Temporomandibular joint (TMJ) traumas involving condylar head and neck can cause fibrous or bony TMJ ankylosis. Condylar fractures are often overlooked on examination and insufficient treatment as a result ankylosis can occur.

Case: A 25-year- old male patient refere to our department with complaint of restriction of mouth opening, left mandibular symhysis and bilateral condylar fracture. He had open reduction for symhysis fracture, closed reduction for condylar fracture in different clinic. In the clinical examination patient>s mouth opening was 2.3mm with deviation. Radiological examination revealed that right TMJ fibrous ankylosis.

Conclusion: Ankylosis may have been developed as sequel of the condylar fracture. Immediate post-operative jaw physiotherapy is mandatory after closed reduction of condylar fracture. Correct diagnosis and treatment of condylar fracture are most important before the onset of ankylotic lesions.

Keywords: Condyle Fracture, Fibrous Ankylosis, Temporomandibular joint (TMJ)



Osteochondroma of Mandibular Condyle: A Case Report

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Objective: Although most common benign tumor of bone is osteochondroma, in maxillofacial region it is rare. The etiology is unclear and it may be seen in mandibular condyle and coronoid process, posterior maxilla, maxillary sinus or zygomatic arch. Aim of this poster presentation is to evaluate the surgical outcomes and clinical experience of conservative treatment of mandibular condyle osteochondroma.

Case: 37 years old female patient refered to Kocaeli University Faculty of Dentistry Oral and Maxillofacial Surgery Department with the chief complaint of facial asymmetry and limitation of mouth opening for a year. She didn't present any systemic disease or trauma history. The distrophic, well defined unilateral radiopacity on the right mandibular condyle was seen on panoramic x ray and CBCT. Excisional biopsy of the lesion and disk reposition was performed in general anesthesia.Facial asymmetry was established with the guidence of occlusion and maintained without any complications in the control period.

Conclusion: Conservative treatment of condylar osteochondroma is an effective surgical treatment by taking into consideration of preoperative patient evaluation.

Keywords: facial asymmetry, mandibular condyle, osteochondroma



Managment of bilateral edentulous atrophic mandible fracture: A case report

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Objective: With an ageing population, oral and maxillofacial surgeons are seeing an increasing number of fractures of the edentulous mandible. The management of such fractures still leads to much debate and is not universally accepted as a single technique. An atrophic mandible is more vulnerable to fracture due to a decrease in bone volume. The edentulous mandibular fracture is quite difficult for the clinician because the difficulties associated with decreasing bone mass and immobilizing frangles can often result in no bone fusion. Generally, these fractures are seen in elderly individuals whose osteogenesis is reduced, the risk of surgery is important, and local factors related to atrophic, dense cortical bone and insufficient blood supply contribute to the problem. The aim of this presentation is to explain the management of the patient with a toothless atrophic mandible fracture.

Case: A 57-year-old woman applied to Inonu University Faculty of Dentistry Oral and Maxillofacial Surgery due to mandibular fracture. The patient stated that she had a traffic accident 2 days ago. In the radiographic evaluation, a bilateral corpus fracture without separation was observed. The patient was operated under general anesthesia and treated with rigid fixation using 3 mini plates of 2.0 mm thickness.

Conclusion: Mandibular atrophy tends to be critical in the mandibular body. The most common fracture is mandibular corpus in the atrophic mandible. Luhr et al created the mandibular atrophy classification used nowadays, according to mandibular height: Class I,16 to 20 mm; Class II,11 to 15 mm;Class III,<10 mm.

Keywords: atrophic mandible, edentulous, mandibular fracture, rijid internal fixation



Enucleation and Curettage After Marsupialization of Ameloblastoma: 3 Case Reports

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Objective: Ameloblastoma is the most common, benign, local invasive, epithelial odontogenic tumor. The aim of this report is to present three cases of ameloblastoma which were treated with enucleation and curettage after marsupialization.

Case: 18 years old and 39 years old, two female patients with intraoral and extraoral swelling and a male 14 years old patient suspected in routine radiological examination were referred to our clinic. Incisional biopsies were performed and marsupialization process was started. Marsupialization was proceeded until the bone cortex was dense enough to operate the area without mandibular fracture. Enucleation and curettage were performed under general anesthesia. Reconstruction plate was used in two female patients. Patients are still under control without any recurrence.

Conclusion: Although the conservative treatments of ameloblastoma could exhibit reccurence, marsupialization would be considered treatment modality especially in selected unicystic cases

Keywords: enucleation, marsupialization, unicystic ameloblastoma



Dentigerous Cyst In The Maxillary Sinus Related With Impacted Maxillary Premolar: A Case Report

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Objective: Dentigerous cyst, also known as follicular cyst is the second most common form of developmental odontogenic cysts that results from accumulation of fluid between reduced enamel epithelium and the crown of an impacted tooth. In the maxilla, these teeth are sometimes displaces into the maxillary sinus. Dentigerous cysts are typically asymptomatic and an incidental finding on routine radiographic examinations.

Case: A 12-year-old female patient with no systemic diseases consulted to our clinic. The panoramic radiograph showed a radiolucent lesion associated with the impacted second premolar in the left maxillary region. The tooth was extracted, then cyst was enucleated with the cyst epithelium from the maxillary sinus. A foreign object (pencil tip) was observed after enucleation and it was removed out of the sinus. L-PRF was placed in membrane form on the perforated sinus membrane and the flap was primarily sutured.

Conclusion: Dentigerous cysts remain asymptomatic and are usually diagnosed incidentally during the routine radiological examination. The conventional approach is the removal of the cyst together with the impacted tooth, to allow the regeneration of healthy bone.

Keywords: Dentigerous Cyst, maxillary sinus, impacted teeth



Impacted Distomolar and Wisdom Teeth with Dentigerous Cyst: A Case Report

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Objective: Distomolar teeth are supernumerary teeth placed at the distal of the third molar teeth. Occurrence of supernumerary teeth can be single, multiple, unilateral or bilateral in one or both jaws. Problems such as root resorption or delayed eruption of adjacent tooth and orthodontic problems could be seen related to these teeth. This study aimed to present a case with bilateral supernumerary premolar teeth and distomalar tooth in the mandible.

Case: 55 year-old male patient was presented with a cyst related impacted distomolar tooth in the right mandible. Patient had no complaints about bilateral supernumerary teeth in the mandibular premolar region. Surgical extraction of symptomatic impacted third molar and distomolar teeth and enucleation was performed. No surgical intervention was made on the supernumerary teeth which were impacted in the mandibular premolar region. The pathological examination pointed the follicular cyst. No complications or recurrence was seen after one year follow-up.

Conclusion: Due to adverse effects on the permanent dentition, early diagnosis and treatment of supernumerary teeth is important to prevent or minimize possible complications.

Keywords: impacted teeth, dentigerous cyst, distomolar, supernumerary teeth



An Infected Case of Compound Odontoma: A Case Report

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Objective: Odontomas are the most common odontogenic tumors of the jaws of unknown etiology. The majority of compound odontomas are seen in the maxilla with impacted canine, while complex odontomas are usually observed in the mandibular molar region. The aim of this report is to present a case of compound odontoma seen in the mandibular molar region.

Case: A 61-year-old female patient was admitted to the Department of Oral and Maxillofacial Surgery with the complaint of pain and infection in the right mandible. In the panoramic radiograph obtained from the patient, an irregular-shaped lesion was detected in the mandibular right molar region. This lesion was surgically excised under local anesthesia. As result of pathologic examination was diagnosed as compound odontoma.

Conclusion: The irregular radiopaque bone lesions resemble each other. Compound odontomas may mimic osteomyelitis in infected bone lesions. Therefore, the pathological evaluation of these lesions is of great importance. Thus, possible misdiagnoses are prevented.

Keywords: Radiopaque bone lesion, Odontoma, Osteomyelit



Guided Bone Regeneration with the Bone Lid Method in Cyst Enucleation

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Objective: Residual cyst is an odontogenic cyst, which is derived from the inflammatory activation of epithelial root sheath residues of cell rests of Malassez in the periodontal ligament. Soft tissue collapse and insufficient bone healing may occur after conventional cyst enucleation. The aim of this report is to present a case of residual cyst removal via a bone lid to allow guided bone regeneration in the mandible.

Case: A 43-year-old male patient referred to our clinic with a chief complaint of mild swelling in the left anterior region of the mandible for the past 6 months. Intraoral clinical examination revealed a round to oval swelling which was located over labial mucosa of mandible region in association with 33 and 35. Related teeth was vital. A panoramic radiograph showed unilocular radiolucent lesion. Therefore, based on clinical findings, radiographic investigations the provisional diagnosis of residual cyst was made. Enucleation was performed by creating a window in the buccal cortical plate with piezosurgery. After enucleation, the bone lid was replaced to its initial position and fixation was accomplished by titanium mini-plate and screws. Histopathological investigation showed the presence of stratified squamous epithelium with vacuolations and inflammatory cellular infiltration suggesting of residual cyst.

Conclusion: Allowing guided bone regeneration, the bone lid method is a convenient method in treatment of cysts with an intact buccal cortical plate.

Keywords: bone flap, bone lid, enucleation, piezosurgery, enucleation



PP-100 Osteochondroma of The Mandibular Condyle: A Case Report

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Objective: Osteochondroma or osteocartilaginous exostosis, is a cartilage-capped exophytic lesion that arises from the cortex of a bone. Although osteochondroma is considered as the most common tumor of skeletal bones, it is relatively rare in the jaw. The osteochondroma of the mandible occurs at the condyle or the tip of the coronoid process whereas called Jacob's Disease when mandibular coronoid process is involved. In this report, we present an osteochondroma case extending from the mandibular condyle to the cranial base.

Case: A 55-year male patient was referred to Department of Oral and Maxillofacial Surgery of Bezmialem Vakif University Dentistry Faculty with complaints of mouth opening limitation and facial asymmetry. The distance of maximum mouth opening was 9 mm in length. A computed tomography scan showed the right condylar processes hyperplasia. The condyle and pathological segment resections were performed with interpositional gap arthroplasty and abdominal fat graft was preferred. After the operation, the patient's maximal incisal opening was 45 mm. Pathological examination revealed irregularly arranged fibrous, cartilaginous and bony elements. Based on histological features, a final diagnosis of osteochondroma was made. No complaints were reported by the patient during 1-year follow-up.

Conclusion: Osteochondroma is rarely seen on the mandibular condyle. Clinical symptoms may be similar in many temporomandibular joint diseases such as ankylosis, Jacob's Disease etc. Therefore the differential diagnosis should be well done. Gap arthroplasty is commonly recommended as the best treatment option in such cases.

Keywords: Condyle, Gap Arthroplasty, Osteochondroma



Deciduous and Permanent Canine Associated with an Odontoma: A Case Report

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Objective: Odontoma is the most common odontogenic tumor of oral cavity. It's generally asymptomatic but can lead to eruption disturbances especially delayed or ectopic eruption. Odontomas are classified as complex and compound odontoma according to organisation of its hard tissues and likeliness to a tooth. In the literature complex odontomas are commonly seen in posterior mandible while compound odontomas are more common in anterior maxilla. In many studies retantion of permanent teeth is the most prevelant symptom. This is a presentation of a case with odontoma in maxillary canine region.

Case: A 16 years old male referred to Department of Oral and Maxillofacial Surgery with complaint of a swelling and mild pain in left maxillary canine region. In orthopantomograph, a multiple calcified mass was detected in this region in addition to impacted canine. The patient accept orthodontic treatment after the surgery, thus tumor was removed under local anesthesia. Diagnosis of complex odontoma was confirmed after histopathological examination. Undoubtful healing process was seen clinically and radiologically 1 month later from surgery. The case is still following up.

Conclusion: A retained deciduous tooth and its unerupted successor can be associated with an odontoma.

Keywords: odontoma, impacted teeth, oral tumor



PP-102 Complex Odontoma Causing Impacted Teeth: A Case Report

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Objective: Complex odontomas are benign odontogenic tumors. Complex odontomas are often asymptomatic and are diagnosed on routine radiography. The aim of this report is to present a case of complex odontoma that causes impacted molar teeth.

Case: A 16-year-old male patient was referred to the Department of Maxillofacial Surgery, Faculty of Dentistry, Adiyaman University due to lack of molar teeth. As a result of the panoramic radiography taken from the patient, the first and second molar teeth were impacted in the maxilla and a radiopaque lesion was observed in the zone of the maxillary sinus. Dental Tomography was taken from the patient>s right upper jaw and a radiopaque lesion of approximately 4 cm in diameter was confirmed. It was decided to remove the impacted molar teeth because of the low probability of eruption. As a result of the interpretation of the lesion in favor of odontoma, the radiopaque lesion was resected under general anesthesia and removed in the impacted teeth. According to both clinical and pathological results, this radiopaque lesion was reported as complex odontoma. As a result of the patient>s 2-year follow-up, the operated area was completely healed with bone structure.

Conclusion: When the teeth are not detected in the jaws, the reasons for not erupting should be investigated and odontoma possibility should be considered. In the early diagnosis of odontoma cases, these lesions can be surgically removed to eruption the teeth.

Keywords: Odontoma, Impacted tooth, Odontogenic tumor



PP-103 Supernumerary Teeth Developed After Orthodontic Treatment

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Objective: Supernumerary teeth are developmental anomalies and the etiology is not yet fully understood which may cause complications such as displacement or root resorption of the adjacent tooth and orthodontic problems of the dental arch. Supernumerary teeth mostly develop congenitally. In this study, we aimed to present a case with unilateral supernumerary premolar teeth in the mandible which occurred during an orthodontic treatment.

Case: A 12 year-old female patient was presented for permanent premolar extractions that are not supernumerary teeth during her orthodontic treatment. This patient has no supernumerary teeth at the beginning of the orthodontic treatment. In addition, the end of the first year of the orthodontic treatment, the supernumerary teeth were seen in a routine panoramic radiograph taken during the control session. Supernumerary tooth was surgically removed.

Conclusion: Supernumerary teeth are mostly develop in early ages of life but rarely could develop in later times. Due to adverse effects on the permanent dentition, early diagnosis and treatment of supernumerary tooth is important to prevent or minimize complications.

Keywords: supernumerary teeth, orthodontic extraction, hyperdontia



Central Giant Cell Granuloma mimicking Radicular cyst: A Rare Case Report

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Objective: Central giant cell granulomas are benign lesions of the jaw and the etiology is unknown. It can also be seen in the toothless regions of the jaw, as well as in the apex of the teeth. The aim of this article is to present a case of central giant cell granuloma in the apex of the endodontically treated central incisor tooth

Case: A 19-year-old female patient was referred to the Department of Maxillofacial Surgery of the Faculty of Dentistry of Adiyaman University due to the mobility of the right central incisor in the maxilla. In the panoramic radiography obtained from the patient, a wide radiolucent lesion and resorption of the tooth root were detected in the apex of the right upper central tooth that was treated with endodontic treatment. The tooth was extracted and the lesion was enucleated and sent to the pathology. The lesion was diagnosed to be a radicular cyst by pathology department. On the one year follow-up of the patient, the lesion recurred in a panoramic radiograph and was re-surgically resected and sent to pathology. The lesion was diagnosed central giant cell granuloma.

Conclusion: Radical cyst-like lesions should be followed after endodontic and surgical treatment. The lesions located at the root end should be evaluated as pathological. Thus, possible misdiagnosis and deterioration of prognosis can be prevented.

Keywords: Central giant cell granuloma, Radicular cyst, Radiolucent lesion



Vital Third Molar Tooth After Autotransplantation

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Objective: Autotransplantation refers to the repositioning of an autogenous erupted or unerupted tooth from one site to another in the same individual. Autotransplantation of immature third molars is a preferred method for young individuals, especially when the first or second molars are lost early. This report presents a transplanted mandibular third molar tooth in place of the permanent first molar tooth socket at an early age.

Case: 17-year-old female patient referred to our clinic for the extraction of left lower first molar tooth due to extreme substance loss. Immature third molar teeth in the same region was found to be suitable for transplantation. Extraction of the first molar and autotransplantation were performed in one session. After the transplantation, no pathology was found in the related teeth and 6-month after the transplantation, positive vitality of autotransplanted tooth was observed.

Conclusion: Autotransplantation is a good alternative to dental implants and prosthetic treatment in young individuals and the vitality can be maintained in immature teeth after the intervention which eradicates the necessity of root canal therapy.

Keywords: Autotransplantation, root canal therapy, impacted teeth



PP-106 Extraoral Approach to Fibroma in The Submandibular Region

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Fibroma is a benign tumor of fibrous connective tissue that can be considered a reactionary connective tissue hyperplasia in response to trauma and irritation. They usually present hard consistency, are nodular and asymptomatic, with a similar color to the mucosa, sessile base, smooth surface, located in the buccal mucosa along the line of occlusion, tongue and lip mucosa. Several therapeutic procedures have been described in the literature for fibromas, such as surgical excision with scalpel, erbium-doped yttrium aluminium garnet (Er:YAG) lasers and ablation with carbon dioxide (CO2), marsupialization, and cryosurgery. In our case, mobile soft tissue growth was detected in the submandibular region and fibroma was taken using by scalpel with an extraoral approach under local anesthesia.

Keywords: fibroma, submandibular, extraoral



Marsupialization Of A Large Dentigerous Cyst In The Mandibular Ramus

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Dentigerous cysts are common odontogenic cysts associated with unerupted teeth. Marsupialization and decompression may be necessary in some cases, mainly when the dentigerous cysts are large, thus causing an increased risk of bone fracture, or if it has engulfed important anatomic regions such as the inferior alveolar nerve or teeth, consequently causing alveolar bone growth failure. In these cases, marsupialization is performed to reduce the pressure in the cyst and wait for the cyst to shrink. Hereby, we present a case of a 50-year-old young male patient presenting with dentigerous cyst that was treated successfully by marsupialization. The radiographic examination revealed a unilocular radiolucent lesion which is covering all right madibular ramus with well-defined margins associated with unerupted mandibular right third molar. The dentigerous cyst was treated successfully by marsupialization and then cyst was successfully enucleated.

Keywords: marsupialization, dentigeröz, odontogenic



PP-108 Traumatic Bone Cyst In The Posterior Mandible: A Case Report

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Objective: Traumatic bone cysts may be characterized by the presence of an asymptomatic cavity in the bone without epithelial lining. Although it is usually observed in the metaphysis of long bones, it can rarely be observed in the jaws. In this case report, traumatic bone cyst observed in the posterior region of the mandible is presented.

Case: A 17-year-old male patient was referred from the Department of Oral Diagnosis and Radiology after routine clinical and radiographic examination. On radiographic examination, a well-circumscribed, radiolucent area was observed in the apical of the first and second molar teeth. Thermal and electrical pulp testing showed that the teeth were vital. After the aspiration biopsy revealed negative results, the cystic region was opened under local anesthesia. A bone window was opened from the apical of the second molar tooth. A empty bone cavity with no epithelium was observed. The cyst walls were curetted to induce "fresh" bleeding. No complications were observed in the postoperative period. On follow-up radiographs, it was observed that the cyst cavity was filled with new bone.

Conclusion: Traumatic bone cysts are generally detected in the second and third decades of life. It is usually asymptomatic and more frequently observed in the posterior mandible. The role of trauma in traumatic bone cyst formation is constantly emphasized. Intraosseous hematoma induced enzymatic activity due to trauma is reported to cause bone loss. In the treatment of traumatic bone cyst, curettage of the bone cavity and re-bleeding of the region are recommended.

Keywords: Bone cavity, Simple bone cyst, Traumatic bone cyst



Small-Sized Peripheral Osteoma Localized in the Mandible: A Case Report

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Objective: Osteomas are well-defined benign tumors with slow growth pattern. In this case report, a small-sized peripheral osteoma and it's surgical excision presented which developed in the mandible for a long time.

Case: A 33-year-old female patient admitted to Bolu Abant Izzet Baysal University Department of Oral and Maxillofacial Surgery clinic with a complaint of a mass in her lower jaw that had increased over the last 15 years. The patient is undergoing orthodontic treatment and wants to have this mass removed because of the difficulties she experienced during orthodontic treatment. The lesion is seen as radiopacity in mandibula left incisor region on panoramic radiography, although it is not clear due to its small size. Under local anesthesia, the semilunar flap is rised and the lesion is seen. The lesion was excised with a fine chisel and corrected the tour and sharp bone borders. Histopathological examination was consistent with osteoma. There was no recurrence in 1-year follow-up.

Conclusion: Slowly growing osteomas do not cause an acute problem to the patient and sometimes can reach large dimensions. In this patient, the excision of osteoma in a small size area which may be an obstacle to orthodontic treatment was found to be successful without complication and without recurrence.

Keywords: benign, excision, mandible, osteoma



PP-110 A Case of Different Complications of Sinusitis: Fronto Ethmoido Orbital Empyema

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Objective: Sinusitis is the most common pathology of maxillary sinus diseases. The etiology of maxillary sinusitis can be caused by dental or rhinogen. The clinical course may be acute or chronic due to the virulence of microorganisms and the immune system. Empyema is the accumulation of infection in the body cavities. The most common site is the pleural space. S.Aureus is a type of bacteria that usually causes infection.

Case: In this case, it is seen that chronic sinusitis causes an advanced complication. A 55-yearold male patient was admitted to the hospital with complaints of fever, nausea and swelling. Physical examination revealed proptosis in the left eye and erythema and swelling in the frontal region. Subcutaneous emphysema in the frontal region was accompanied by signs of crepitation. Radiographic examination showed that the wall integrity of the frontal and ethmoidal sinuses was impaired. However, the presence of fluid compatible with empyema in the periorbital and subdural regions together with proptosis was detected in the left eye. The patient underwent surgery with frontal intervention and was treated with empyema.

Conclusion: The most common intracranial complication of sinusitis is frontho ethmoido orbital cellulitis. Another extracranial complication of sinusitis is frontal supperiostal abscess from frontal sinusitis. Intracranial complication such as epidural abscess, subdural empyema, meningitis, cerebral abscess, and dural-vein thrombophlebitis may result from sinusitis, particulary from frontal or sphenoid infections. Here we report a patient who was with complications from frontal and ethmoid sinuzitis which was with periorbital sellulitis, amphyem

Keywords: complications, empyma, frontal, sinusitis



Isolated Zygomatic Arch Fracture: A Two Case Report

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Objective: Zygomatic bone is situated at the lateral part of the facial triangle, and is frequently exposed to maxillofacial traumas, since it forms the most prominent region of the facial skeleton. Isolated zygomatic arch fractures comprise 5% of all facial fractures and 10% of zygomatic bone fractures. Various intraoral and extra-oral approaches have been used as closed reduction techniques in isolated zygomatic arch fractures.

Case: In this case report, the clinical and radiological characteristics, and the treatment options of isolated zygomatic arch fractures have been discussed. The traumatic zygomatic arch fracture of the zygomatic arch region of two patient and its treatment have been reported in this case report. The Gillies method should be considered as an effective treatment method in isolated zygomatic arch fracture cases due to its feasibility and esthetic properties.

Conclusion: This method may be preferred as a successful treatment alternative in uncomplicated zygomatic arch fractures to provide an effective treatment and minimize the risk of complications for both the patient and the physician.

Keywords: Gillies method, Trauma, Zygomatic arch



PP-112 Distrophic Calcification Image in Tonsil: A Report of Clinical Case

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Objective: Tonsillolith is a rare dystrophic calcification as a result of chronic inflammation of the tonsils. Three asymptomatic cases of tonsillolith are reported, incidentally discovered through panoramic radiographs, which showed different sizes of radiopaque images, varying from 2 to 5mm; cases I and III images did not overlap the mandible ramus, which led to a probable diagnosis of soft tissue calcification.

Case: A 55-year-old woman signed in for dental evaluation. She had pain in swollen mouth and pain in her tongue movements. panoramic radiograph showed unilateral radiopaque images, with average size of 5mm, overlapping the mandible ramus and ear cartilage, indicating calcification in the soft tissues. Clinical intra-oral examination showed white plaques on the right tonsil and with no history of recurrent tonsil inflammation. The patient is currently under follow-up.

Conclusion: Dystrophic calcification are rare. However, it should be considered in the differential diagnosis. Furthermore, differential diagnosis should be made with stylohyoid ligament ossification, osteoma cutis, cysticercosis, osteomyelitis, condensing osteitis, osteoma, odontoma and fibrous dysplasia which can be observed in this region and can mimic lymph node calcification.

Keywords: Panoramic radiography, Tonsillolith, tonsil concretions



A Unique Case: Maybe a New Dental Anomaly

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Objective: In this case report we aimed to present a unique anomaly of the teeth affected in both maxilla and mandible.

Case: A 15-year-old female patient was referred to Bolu Abant Izzet Baysal University Department of Oral and Maxillofacial Surgery Clinic for extraction of impacted left maxillary canine. During orthodontic treatment, extrusion with button was tried to this tooth one year but not successful. The patient's left eye is congenital cataract and visually impaired. The patient has inadequate maxillary development. There is anterior and posterior cross-bite when occlusion is observed. The patient has no previously named syndrome or disease. Panoramic radiographs showed that the maxilla and mandible had multiple impacted teeth. The apical closures of these teeth have not been terminated and the root forms were seen to be longer than normal. The impacted left maxillary canine was extracted smoothly under local anesthesia.

Conclusion: Cataract formation in the patient's eye and this shape anomaly of the teeth suggested that the abnormalities of the patient have originate from ectoderm and mesenchyme. As a result, this anomaly was unique in that, it did not show similarity to dental anomalies in the literature.

Keywords: dental anomaly, extrusion, impacted tooth, unique



An Ironic Injury with Car Washing Compressor

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Objective: Trauma from external causes represents one of the greatest challenges for public health services in different regions of the world. Trauma in head, neck and face is one of the most prevalent and among the etiological agents of facial trauma, traffic accidents, falls, aggressions and penetrating wounds (caused by firearms) stand out, with sociodemographic, cultural and environmental factors playing an important role in the epidemiology of these outcomes.

Case: A 16-year-old man,a syrian child worker, joined in urgent outpatient clinic of a provincial hospital after an facial injury with fracture of the zigomaticomaxillary complex, orbital rim fracture. The patient reported that the trauma was caused in a field of auto tunning center while he was washing the car. he said he was wounded by slamming him in the face. Soft tissues of the facial were aesthetically sutured and the facial nerve was preserved.

Conclusion: Epidemiological studies are necessary for a better understanding of the distribution patterns of lesions, etiological factors, and for providing valuable information for the planning of health actions.

Unfortunately, especially in the maxillofacial area, there is not concrete data for such accidents. Sporadic reports are made and a lack of information exists for the outcome of such events.

Keywords: atypical facial trauma, occupational, car washer, reconstruction



associated injurie



Corticosteroid Injections to the Giant Cell Granuloma in Jaw: A Case Report

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Objective: Giant cell granuloma is a proliferative lesion of the jaw with an unknown etiology. The lesions may be central or peripheral and often occur in the first two decades of life. The aim of this poster presentation is to evaluate the effect of intralesional corticosteroid injection to surgical and clinical experience of central giant cell granuloma.

Case: 59-year-old female patient was referred to Kocaeli University Department of Oral and Maxillofacial Surgery complaining of enlargement in her jaw. The radiolucent area was detected in the right mandible anterior crest with lingual expansion. An incisional biopsy specimen revealed giant cell granuloma, and then intralesional triamcinolone acetonide injection was performed once a week for six weeks. Then the lesion was totally excised.

Conclusion: It is thought that triamcinolone acetonide injection does not cause any change in lesion size or intraoperative process.

Keywords: corticosteroids, giant cell granuloma, jaw



Surgical Treatment of a Large Odontogenic Cyst in Patient with Down Syndrome

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Objective: The dentigerous cyst is the second most common cyst of the jaws comprising percent of all jaw cysts, and they are more frequent in males and more common in the mandible. Dentigerous cysts are odontogenic lesions arising from the crown of impacted, embedded, or unerupted teeth. Dentigerous cysts are usually discovered on routine radiographic examination. The pathogenesis of these cysts is unknown. They are believed to originate from the follicle of the unerupted tooth. The maxillary canine and mandibular third molar are involved most frequently. Treatment methods have included decompression, marsupialisation, and enucleation.

Case: A 16 years old patient with Down Syndrome presented with swelling and pain at premolar maxillary region. The cone-beam CT image suggested the presence of a well-defined wide radiolucent area extended from right first incisor to first molar with many impacted teeth. Under general anesthesia, the cyst was enucleated, together with the impacted teeth. After histopathologic examination, the cyst was diagnosed as a dentigerous cyst.

Conclusion: The patient was recalled after a month, clinical examination revealed uneventful and satisfactory healing. This case illustrates the successful management of a large dentigerous cyst with enucleation.

Keywords: cyst, down syndrome, enucleation, impacted teeth



Canina fossa abscess originated from maxillary anterior deciduous teeth in 22 month child: case report

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Objective: Canina fossa abscesses can lead to the development of secondary abscesses, infection of incisors and canines in the upper jaw and maxillary sinusitis infection. Infection spreads through the bone and periosteum toward nearby or more distant structures and spaces

Case: A 22 month old male patient refer to our department with complaints of swelling in his right-side of his face. According to mother, the complaint arose one day ago of our clinic visit. The patient had a history of pain, fever and runny nose. The patient present swelling and redness in infraorbital region spreading the lower toward the eyelid. We determine caries on the incisor teeth and mobility oby intraoral examination. The patient received 250 mg of amoxicillin/ clavulonate acid intravenously two times a day. After 3 days patient's complaint decreased and following infiltration anesthesia teeth 51,52,53,61,62 was extracted. The abscess drained spontaneously after teeth extraction. The patient receive 200 mg of amoxicillin/clavulonate acid by orally two times a day until a week.

Conclusion: Canina fossa abscess is an odontogenic infection that can lead to life-threatening complications. Successful treatments require early recognition, determination of etiological factors, appropriate medical and surgical management

Keywords: abscess, canina, fossa



PP-118 The Irritation Fibromas Of Oral Cavity: A Report Of Three Cases

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Objective: Irritation fibromas which are distinctly named as hyperplastic-scar tissue or focalfibrous-hyperplasia, are reactive and hyperplastic lesions arising from chronic trauma on oral mucosal membranes. Usually they can be seen on lower lip, lateral borders of tounge and buccal mucosal sites. The treatment of choice is excision and eliminating the irritating factors. In this case report we aim to present an unique case because of its localization (maxillary canine region)and two other cases which were arisen due to bad habits.

Case: At different time intervals, three patients were referred to our clinic complaining of gingival and buccal mucosal growths. On clinical examination;

- The first patient had a large, fibrous, mucosal coloured gingival growth in the right maxillary canine region,

- The second patient who had had lip and cheek biting habit, had a fibrotic, mucosa coloured growth on the left buccal mucosa.

- The third patient who had had lip biting habit, was diagnosed with a fibrotic, dark coloured, nodular growth on the oral aspect of lower lip.

The lesions were excised and pathologic examination verified the lesions as irritation fibromas. All sites healed uneventfully.

Discussion: Irritation fibromas are reactive hyperplastic lesions and arise in response to some kind of stimuli, such as parafunctional habits or cyclic trauma. In our cases, two lesions was associated with lip and the cheek biting habits and the other lesion was associated with chronic irritation by plaque. Eliminating the bad habit and improving oral hygiene, following routine dental visits can hinder these lesions.

Keywords: Irritation Fibroma, Lip and Cheek Biting, Maxillary



Conservative approach to a large odontogenic keratocyst: A case report

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Objective: Odontogenic keratocyst (OKC) is an epithelial developmental cyst that occurs approximately 11% of jaw cysts. It is called OKC due to involving keratinized epithelium. Also, OKC can progress asymptomatic until expansion and infection. The aim of this study is to evaluate the treatment approach in a large OKC in the mandible.

Case: A 51-year-old man admitted to Bolu Abant Izzet Baysal University, Department of Maxillofacial Surgery with excessive tooth pain and malodor. A large caries and pus were observed in the right lower first molar in the clinical examination. No expansion was noted. With regard to orthopantomographic and computerized tomography evaluation, a large multilocular and well-restricted lesion originated from right second molar to left canine in the mandible was detected. Inferior alveolar nerve (IAN) was inferiorly malpositioned by the cystic lesion. Under local anesthesia, total enucleation was performed. Histopathological examination revealed "parakeratotic type of OKC". IAN was protected and repositioned at normal position. The paresthesia and recurrence were not observed on the 6th month follow-up.

Conclusion: The recurrence rate of sole enucleation in the treatment of OKC is more than the other odontogenic cysts. But, if resection surgery is preferred, the mandibular discontinuity and IAN damage may occur. In this report, the sensorial and functional sequelaes were tried to be eliminated by conservative approach and IAN reposition.

Keywords: Marginal resection, Nerve reposition, Odontogenic keratocyst



Giant Radicular Cyst of Maxilla Associated with Maxillary Sinus: A Case Report

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Objective: Radicular cyst is the most common odontogenic cystic lesions in the jaws and generally asymptomatic unless infected. These are mostly seen in the third and fourth decade and shows male predilection. Radiographically, less than one centimetre in diameter. Although, giant multilocular radiolucent radicular cysts have also been reported, which is extremely rare.

Case: A 32-year-old male patient was referred to the Ordu University Faculty of Dentistry Department of Oral and Maxillofacial Surgery in Turkey for routine dental examination. Panoramic radiography revealed a giant, multilocular radiolucent lesion in the maxilla with smooth surface. It was associated with all the maxillary teeth and the nose floor was not visible. Cyst was enucleated with extraction of maxillary right first incisor under general anesthesia. Excised tissue was sent for histopathological investigation. Radicular cyst was diagnosed.

Conclusion: The aim of this study, to report a rare case of giant multilocular radicular cystassociated with maxillary sinus and to discuss the reason for reaching large dimensions and treatment methods.

Keywords: Radicular Cyst, Odontogenic Cyst, Enucleation vs. Marsupialisation



PP-121 An Extencive Multicystic Ameloblastoma in Mandible: A Case Report

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Objective: Ameloblastoma is a benign odontogenic tumor that has locally invasive, aggressive and destructive features with high capacity of recurrence. It is derived from different odontogenic epithelial sources. According to the histologic and clinical consideration, ameloblastomas can be classified into four types: solid or multicystic ameloblastoma; unicystic ameloblastoma, peripheral or extra osseous ameloblastoma and desmoplastic ameloblastoma.

Case: A 86 years old male patient was referred to Bolu Abant Izzet Baysal University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery with the complain of large extraoral swelling on the left side of the mandible. The ortopantomogram showed a radiolucent lesion in the form of soap bubbles extending from the right body of the mandible to the left ramus(figure 1). The diagnosis of ameloblastoma was confirmed by the histopathological evaluation. Treatment modalities of ameloblastoma are determined based on the clinical extent of the tumor and histopathological findings. Due to the patient refused the mandibulectomy we performed conservative treatment.

Conclusion: The ameloblastoma is usually of late diagnosis because of its poor symptoms and low prevalence. Its treatment preferably includes the resection with safety margins and immediate reconstruction whenever possible. The main success factor associated with the treatment is the early diagnosis and to correlate the histopathologic findings with clinical and radiographic features to achieve at a correct definitive diagnosis as all such lesions might have prognostically different biologic behaviors and the final diagnosis may alter the therapeutic decision significantly.

Keywords: ameloblastoma, multicystic, odontogenic tumor



figure amloblastoma



Recurrence of Keratocystic Odontogenic Tumor After Conservative Surgical Treatment: A Case Report

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Objective: According to WHO (World Health Organization), keratocystic odontogenic tumour (KCOT) is benign unicystic or multicystic intraosseous tumors of odontogenic origin, with a characteristic lining of parakeratinized stratified squamous epithelium. The purpose of this report is to emphasize the importance of histopathological evaluation of odontogenic lesions to determine the surgical approach.

Case Report: A 43 years old female patient was referred to Bolu Abant Izzet Baysal University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery with the complain of cyst enucleation history. Cone beam computed tomography showed a hypodense area surrounded by irregular bone in the right posterior mandible. She underwent two operations 17 and 3 years ago with the diagnosis of radicular cyst in the same region. Based on clinical and radiological examination and history of recurrences, the diagnosis was considered as KCOT. We performed an curettage after cyst enucleation. The diagnosis was confirmed by the histopathological examination. No recurrencis was observed in control.

Conclusion: KCOT's have aggressive and infiltrative behavior. The histopathological examination is crucial for diagnosis of the KCOT, and the surgical approach must be aggressive to minimalize the risk of recurrence.

Keywords: KCOT, recurrency, odontogenic tumor



Dentigerous Cyst Associated With A Transmigrated Canine Of The Mandibular Symphysis: A Case Report

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Objective: Transmigration is a rare phenomenon seen almost exclusively in the mandibular canines. Transmigration, is an intraosseous displacement of an unerupted tooth in which a movement phenomenon causes it to cross midline by more than half. Dentigerous cyst is one of the most common types of odontogenic cyst. Accumulation of fluid between the reduced enamel epithelium and the tooth crown is suggested as the possible etiopathogenesis of this particular cyst by most authors. Clinically, it is asymptomatic but can cause cortical bone expansion. Dentigerous cyst is always associated with an unerupted or developing tooth bud, and is found most frequently associated ith crowns of mandibular third molars followed by maxillary canines and then maxillary third molars.

Case: A 40 year-old boy presented with a pain in the left mandible anterior region of 1-2 months duration. The overall general physical health of the patient was good with nonspecific general medical history. The patient was complain of pain during palpation. The radiographic examination revelaed a unilocular lesion with involvement of the developing permanent mandibular canine. After obtaining an informed consent, surgical intervention was performed under general anesthesia. Treatment procedure comprised of extraction of primary canines and with the enucleation of the cystic lining.

Conclusion: Dentigerous cysts may cause symptom free large bone defects. It is therefore important to perform radiographic examination of all unerupted teeth. Several treatment options have been suggested including complete enucleation and marsupialization. The size of dentigerous cysts is important in determining the type of treatment to be applied.

Keywords: Transmigration, Mandible Symphysis, Dentigerous Cyst, Canine



intraoperative photograph







intraoperative photograph



intraoperative photograph





intraoperative photograph



Panoramic radiograph





A Patient With Crouzon Syndrome Treated By Orthognathic Surgery: A Case Report

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Objective: Crouzon syndrome; craniocinostosis, shallow orbita, ocular proptosis, mid-face hypoplasia, beak shaped nose is characterized by the appearance. Orthognathic surgery is recommended as part of a staged reconstructive approach for the management of the maxillomandibular skeletal discrepancies and malocclusion in patients with Apert and Crouzon syndromes. Surgical treatment of the upper and midface are performed during infancy and childhood, and the maxillomandibular skeletal discrepancy and malocclusion is managed during adolescence.

Case: A 20-year-old female patient with crouzon syndrome was admitted to Inonu University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. The patient who had class 3 malocclusion had been operated SARME (surgery assisted rapid maxillary expansion) surgery 2 years ago. After 21 months of orthodontic treatment, it was decided to perform bimaxillary orthognathic surgery. The patient was anesthetized with general anesthesia. The upper jaw Lefort 1 and bilateral sagittal split osteotomy were performed on the lower jaw. Approximately 300 minutes of surgery; the upper jaw was brought to the front, fixed using mini screws and plates. Bilateral sagittal split osteotomies were performed in the lower jaw and 3.7 mm back were restored and fixed mini plate and mini screws. The patient was hospitalized for 5 days without any postoperative complications and was discharged. After surgery, the patient had a class 1 occlusion and improved facial contours.

Conclusion: Bilateral sagittal ramus osteotomy with Le Fort I; we argue that mild or moderate facial hypoplasia is a good treatment option for patients with acceptable nasal profile and malocclusion.

Keywords: crouzon, orthognathic, surgery, syndrome



Recurrent Keratocysts of the Mandible in Association with Gorlin-Goltz (Nevoid basal-cell carcinoma syndrome) Syndrome: A Case Report

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Objective: Keratocysts are comparatively rare benign neoplasms. In 2005, this formerly designated odontogenic cyst was reclassified by the World Health Organization as a tumor [1] due to its local aggressive and recurrent behavior. This term "tumor," however, has been somewhat controversial due to a lack of clearly described neoplastic etiology. In the new revision by the WHO in 2017 [2], the name of "odontogenic keratocyst" (OKC) was reinstituted [3]. OKCs are mostly solitary lesions that can radiologically present a single chamber or septations. Despite their heterogeneous features, OKCs appear most frequently in the 3rd molar area of the mandible, in the 2–4th decade of life, with a slight predominance in males [4, 5].

Case: A male patient of 24 years old came to our dental clinic department with a displacement of molar teeth in the left and right mandibular region of the face 6 years ago. After clinical and radiological examination Gorlin-Goltz syndrome is diagnosed for that patient. The patient who was clinical followed-up for 6 years was operated under general anesthesia in 2019.

Conclusion: In this syndrome early diagnosis is very important due to occurrence of tumors in future. The diagnosis of the multiple keratocysts which is a primary sign of this syndrome by clinical and radiological examination provides the early treatment of severe tumors that may occur in future.

Keywords: gorlin-goltz, keratocyst, multiloculer, recurrens



Resim 1

Panoramic film of the patient



Resim 2

			T.C. FANBUL ÜNİVERSİ İNKOLOJİ ENSTİTÜ			*
Kullanici Kod	0		Çık	arılan Tarih :		11
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Protokol No:	1348268			Mat. Alındığı Tarihi:	17.06.2	2013 00:00:00
Cinsiyet\Yas :	Erkek	18		Mat. Geliş Tarihi:	17.06.2	2013 00:00:00
Gönderen Bölür	n: TÛMÔR	PATOLOJISI	ABORATUVARI	Klinik Tanı:	Lateral	perodontol kist?
Gönderen Dokte	r: NECAT V	AKUR OLGA	ç			
Yanıt Tarihi :	20.06.201	1		Mat. Alındığı Yer:		
Onat Tarihi :	20.06.201	3		Mat. Alınma Şekli:		

Belek ANTAL

First byopsy of cyst 6 years ago

Resim 3

TANI:	1-Sağ maksilla 2-3 numaralı dişler apikali, enükleasyon: PARAKERATOTİK TİPTE ODONTOJEN KERATOKİST (KERATOKİSTİK ODONTOJEN TÜMÖR, WHO2005). 2- Mandibula sağ taraf, retromolar bölge, enükleasyon: PARAKERATOTİK TİPTE ODONTOJEN KERATOKİST (KERATOKİSTİK ODONTOJEN TÜMÖR, WHO2005).
EPİKRİZ:	Hastanın " Bazal hücreli nevüs sendromu " açısından araştırılması uygun olur.

Results of byopsy in 2013

Resim 4			
*	İ.Ü. ONKOLOJİ TÜMÖR PATOLOJİ	ENSTİTÜSÜ Sİ BİLİM DALI	41 12 2018 15 23
Biyopsi No Hasta Adi Soyadi Alindiği Yer Alinma Şekli Alındığı Tarih Geliş Tarihi Yanıt Tarihi Klinik Tanı	2139 / 2018 ALT SAURETROMOLAR BÓLGE Insizvonel biyopsi 11.12.2018 11:30:00 11.12.2018 11:30:24 21.12.2018 Keratokin	Protokol No : 1891858 Cinsiyet/Yaş : Erkek / 24 T.C. No : Telefon : Bölüm : İst. Uni. Diş H Doktor : Hakkı TANRI	\$2599.0000C
TANI : Mandibula, sağ çekimi ve insizy	taraf, 7 numaralı dişin meziyali- ramu onel biyopsi: ILTIHAPLI ODONTOJ	ıs 2/3 alt bölümü arası, yumuşal EN KERATOKİST, DİS DOK	k doku- kemik içi, diş USU
Tam Kodlari Icd Ön Tani - Son Tai			
ICD-O Histoloji :		Yalus Dr. Ögr. Öyesi	Aland FATMA NIHAN AKSAKALLI

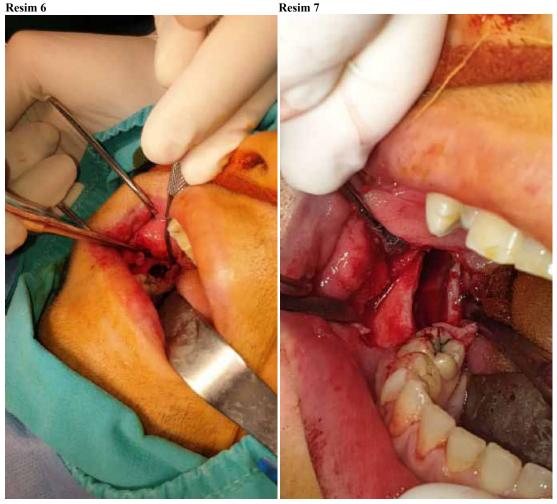
Second byopsy of cyst before surgery in 2018



TANI : Sağ mandibula, kemik içi, eksizyonel biyopsi: ILTİHAPLI ODONTOJEN KERATOKİST Tanı Kodları : Ied Ön Tanı - Son Tanı :

ICD-O Histoloji :

Last byopsy results after the surgery in 2019



Surgery under general anesthesia (1)

Surgery under generall anesthesia (2)





Resim 8



Lesion after surgery



PP-126 Michelin Tire Syndrome: A Case Report

Merve Sefa Tekin, Sercan Yılmaz, Efe Can Sivrikaya, Onur Yılmaz Karadeniz Technical University Department of Oral and Maxillofacial Surgery, Trabzon, TURKEY

Objective: Michelin Tire Baby Syndrome (MTBS) is a rare congenital disorder and characterized clinically well defined multiple ring shaped skin folding. There are only 30 cases reported in the literature. Diagnosis is mainly clinical, and skin folds gradually diminish and disappear with age without any intervention. In addition, supernumerary teeth, cleft palate and dental anomalies can be seen. The pathogenesis of this condition is unclear.

Case: In present case, it was reported a case of MTBS in a 8 year old male. In clinical anamnesis, he has hypertrophic fibrotic tissue in the left maxillary region and the teeth eruption was late. In addition, radiographs were examined and multiple supernumere teeth was seen.

Conclusion: Treatment planning for eruption of the teeth, clinical features, histopathology, prognosis of this rare disorder have been discussed.

Keywords: Michelin Tire Baby Syndrome, newborn, child



Gap coronoidotomy for management of bilateral coronoid process hyperplasia of the mandible: A case report

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Objective: Restriction in mouth opening can be caused by many factors. Hyperplasia of the bilateral coronoid processes causes painless, limited mouth opening as a result of the impingement of the enlarged coronoid process to temporal surface of the zygomatic bone or to the medial surface of zygomatic arch. There are multiple theories as to the causes of long coronoid processes, some of which include temporalis hyperactivity, hormonal stimulus, and genetic inheritance.

Case: A 37 years old male patient referred to our clinic with severe limitation of mouth opening. He had this restriction since his childhood and limitation increased year by year. His physical examination revealed no evidence of facial asymmetry. Elongated bilateral mandibular coronid process was observed in CBCT images of the patient whose maximum mouth opening measured as 12mm. Coronoidectomy or coronoidotomy with intraoral approach followed by long-term postoperative physiotherapy is the recommended treatment model for coronoid process hiperplasia and limited mouth opening. In this presentation, the patient underwent bilateral gap coronoidotomies under general anesthesia. Forty-two mm of maximum mouth opening could be achieved after bilateral coronoidotomy.

Conclusion: Coronoid process hyperplasia as one of the causes of mandibular hypomobility is largely underdiagnosed as it is a very rare situation. Thorough clinical and radiological examination can help to make an accurate diagnosis, treatment plan, and achieve ultimate clinical outcome.

Keywords: coronoid process hiperplasia, gap coronoidotomy, trismus



Dissecting aneurysm of the internal carotid artery as a complication of facial bone trauma

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Objective: The occurrence of Dissecting aneurysms (DAs) in the internal carotid artery (ICA) is exceedingly rare with an average incidence of 2.5–3 per 100 000. DA of the ICA may occur as a consequence of cervicocranial trauma, head and neck surgery, and other multifactorial etiology. The involvement of the internal carotid artery in the dissecting aneurysm as a complication of facial bone trauma is rarely reported in the literature.

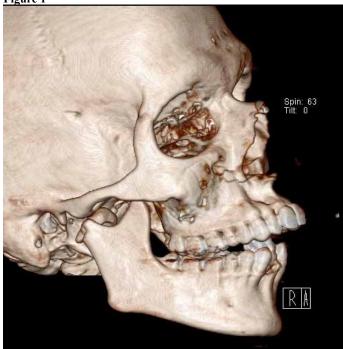
Case: A 22-year-old male who was involved in a motor vehicle accident with associated multiple orthopedic and maxillofacial fractures. Facial bone computed tomography (CT) showed lower anterior dentoalveolar fracture with lingual displacement, bilateral Le Fort I fractures of the maxillae, and medially displaced and fractured right condylar neck. During surgical management of the right condylar fracture severe intraoperative bleeding was encountered. All local measures of packing failed to arrest the bleeding, and the patient underwent emergency angiography to identify and treat the possible source of bleeding. The angiogram identified a large DA of the extracranial part of the right ICA. As the surgical repair was not feasible due to the unfavorable anatomical position of the lesion being close to the skull base. Patient underwent repair with an endovascular stent that resulted in complete resolution of the DA and a good outcome for the patient.

Conclusion: Craniomaxillofacial fractures may contribute to the development of Dissecting aneurysms of the internal carotid artery, which may rupture, leading to a life-threating hemorrhage and an increase in morbidity and mortality.

Keywords: Carotid Artery, Internal, Dissecting Aneurysm, Facial Bones, Case Report



Figure 1



Three- dimensional facial bone CT imaging showing Le Fort I maxillary fracture, medially displaced and fractured right condyle, and dentoalveolar fracture involving the lower anterior segment

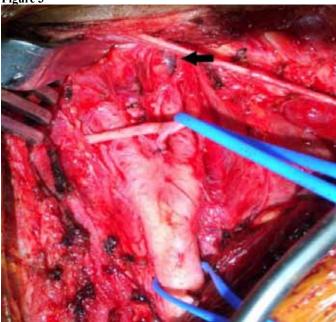
Figure 2



Selective angiogram of the right internal carotid artery (ICA) showing focal dissecting aneurysm of the extracranial part of the right ICA (arrows).



Figure 3



Intraoperative surgical exposure demonstrating dissecting aneurysm of the right internal carotid artery (arrow). Note the close anatomical relation of the lesion to the base of skull.



Figure 4

Post-right internal carotid artery stenting angiogram showing resolution of a dissecting aneurysm.



PP-129 Complex Odontoma Enucleation and Canine Tooth Autotransplantation

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Objective: Odontoma is the most common odontogenic tumor. Histologically;enamel, dentin, cement and pulp tissue are present in all types. It is divided into two basic forms as;complex and compound. It has well-defined sclerotic margins radiographically. It can be easily separated from the healthy tissue by a fibrous capsule. Due to the content of its nature it usually defined as a radiopaque lesion. Even though the growth potential of odontoma is limited it should be enucleated as it may lead to conditions such as cystic transformation, permanent tooth retention, and bone destruction.

Case: A 24-year-old female patient was referred to our clinic with an embedded canine and premolar tooth in addition to complex odontoma which was accidentally found in routine radiographic evaluation. Enucleation of odontoma and extraction of the decidious canine tooth were performed by protecting the alveolar crest under general anesthesia. The alveolar socket was adjusted and embedded canine tooth was gently transplanted in the cavity. After the procedure, semi-rigid splint was applied for 4 weeks and root canal treatment was performed subsequently.

Conclusion: Odontoma was enucleated and the canine tooth was successfully transplanted. The missing tooth gap is compensated without the need for an extra prosthetic intervention. No signs of infection was present in the 1., 3 and 6 months of follow-up. After 1 year follow-up, the patient was satisfied with the outcome.Successful results can be obtained if the surgical procedure is performed noninvasively and splint is applied by the right protocol in the autotransplantation of embedded tooth.

Keywords: autotransplantation, cyst, odontoma



Preoperatif panoramic radiography



figure 2



Preoperatif CBCT



Preoperatif CBCT



figure 4



Postoperatif intraoral examination

figure 5



Postoperatif panoramic radiography



Three-Dimensional Finite Element Analysis of Stress Distribution in Zirconia and Titanium Dental Implants and Periimplant Bone in Patients with Bruxism

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Purpose: Titanium dental implants have been used for the rehabilitation of jaws for over 40 years.Nowadays it is frequently used because of favorable mechanical properties, long-term clinical success and biocompatibility. Zirconia implants were introduced into dental implantology as an alternative to titanium implants. Zirconia seems to be a suitable implant material because of its toothlike color, mechanical properties, biocompatibility, and low plaque affinity. The number of studies about zirconium implants is very much, but there are few studies about stress analysis. This work was done for this reason. The aim of the study was to compare by the finite element method, the principal stresses peaks in the peri implantar bone around titanium and zirconia implants.

Methods: For this study, 6 groups with zircon and titanium implants combined with zircon and titanium abutments were formed.

Result: The obtained results showed that model of titanium implant and screw with zirconia abutment under vertical force least stress occurredon abutment (589 N/mm2) and implant (267 N/mm2). The stress on the screw was highest (650 N/mm2) in the model of zirconia implant, screw and abutment under oblique loading; lowest (162 N/mm2) stress in the model of zirconia implant and abutment with titanium screw under vertical loading.

Conclusion: The von Mises results from zirconia and titanium materials were very similar. The breaking resistance of titanium is higher so it is stronger. Zirconia screw may cause a risk of fracture in the future.

Keywords: Bruxism patients, finite element analysis, stress analysis, titanium implants, zirconia implants



Perception of the Specialty of Oral and Maxillofacial Surgery Among Dental Students

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Purpose: According to Wikipedia, oral and maxillofacial surgery (OMS) specializes in treating many diseases, injuries and defects in the head, neck, face, jaws and the hard and soft tissues of the oral and maxillofacial region. Despite the specialty>s prominent role in the field of dentistry, a lack of complete understanding still remains among dental and medical health professionals as to the exact scope and expertise of the oral and maxillofacial surgeon. The present study aimed to assess the level of knowledge amongst the population of dental students> perceptions, regarding the role of oral and maxillofacial surgery in health care.

Materials-Methods: A survey was done at Karadeniz Technical University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery. The students consisted of the 1st, 2nd, 3rd, 4th and 5th grades. 12 multiple-choice questions were asked. The students were analyzed clinically (4th and 5th grades) and preclinically (1th, 2nd, 3rd grades).

Results: A total of 371 students were included in the study. There were many ideas about what oms could do. Statistically significant associations between the year of dental education and student perceptions of OMS were determined.

Conclusion: There is a need to promote and increase awareness regarding a large spectrum of work that is being carried out by OMS's in order to enhance better patient care and strengthen our specialty.

Keywords: Dental students, oral and maxillofacial surgery, questionnaire study



Augmentation of a Narrow Alveolar Ridge with Guided Bone Regeneration Technique Combined with Platelet Rich Fibrin

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Insufficient bone volume is a common problem for dental implant placement in the maxillary anterior segment. Several techniques have been suggested to reconstruct deficient alveolar ridges and to facilitate dental implant placement. These techniques include bone splitting osteotomy, distraction osteogenesis, inlay and onlay bone grafting. Furthermore, guided bone regeneration (GBR) is an effective alternative that increases the bone volume using subperiosteal barrier. In this case report, a successful reconstruction of a bone defect with alloplastic bone graft combined with platelet rich fibrin and titanium mesh and also with dental implants was presented.

Keywords: PRF, dental implant, titanium mesh, bone greft



PP-133 Basic Technique For Buccolingual Sulcoplasty Patients: A Simple Technical Note

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Basic Technique For Buccolingual Sulcoplasty Patients: A Simple Technical Note Longterm success of dental implants, depends on many factors such as sufficient keratinized gingival presence. Keratinized gingiva presence in atrophic mandible is usually inadequate and soft tissue surgery is required before dental implant placement. Sulcoplasty procedures can be applied from the lingual and buccal region by secondary epithelialization or soft tissue grafting. In this case report, we present sulcoplasty application of anterior mandible from both buccal and lingual aspects. Circummandibular ligation was performed by entering through the submental skin tissue with 20G injector needle tip instead of using a reverdine needle. Result was satisfactory.

Keywords: sulcoplasty, 20G needle, circummandibular ligation



PP-134 Bichectomy to improve facial aesthetics: An effective technique?

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Buccal fat pad (BFP) is a singular structure between the facial muscles. Its removal may enhance the zygomatic prominences resulting in an inverted triangle of beauty. It has been studied extensively within the past four decades, and its use in repairing common and debilitating oral defects is the motive for continued research on this topic. It is vital to understand the etiology of any oral defect or of a lesion of the buccal fat pad, for a misdiagnosis can prevent efective treatment of the underlying problem.

A retrospective study was performed on bichectomy cases in Department of Oral & Maxillofacial Surgery Bolu Abant Izzet Baysal Univercity.

In this review, we describe the anatomy of the buccal fat. The aim of this study was to perform about BFP removal for facial aesthetic improvement, complications and clinical procedures. In order to answer the following research question: What are the indications, complication types and rates, surgical techniques ?

Keywords: bichectomy, buccal fad pad, facial harmony



Surgical Treatment of Squamous Cell Carcinoma of the Maxilla: A Case Report

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Objective: The aim of this study is to present surgical management of a patient with squamous cell carcinoma (SCC) of the maxillary anterior region.

Case: A 56-year-old female patient with complaints of painful mass in the palate, dyspnea and weight loss for 3 months admitted to our clinic. She had a history of paresthesia, pain, and bleeding in her gingiva. An incisional biopsy was planned and the patient was diagnosed with squamose cell carcinoma after histopathological evaluation. Inferior maxillectomy under general anesthesia, was the preferred choice of treatment and the surgery was done by a team of oral and maxillofacial surgeons and otorhinolaryngology- head and neck surgeons.

Conclusion: Early detection of SCC and free resection margins are the most important factors for successful treatment. Neoadjuvant and concomitant chemoradiotherapy are also recommended to support surgical treatment.

Keywords: Squamose cell carcinoma, cancer, malign tumor



PP-136 Chondroblastic Osteosarcoma in maxilla

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Objective: Osteosarcomas are rare malignant neoplasms with a high rate of mortality. Approximately 7% of all osteosarcomas arise in the jawbones. The peak age for jaw tumors is 30 to 39 years. Males slightly outnumber females in reported cases. Maxilla and mandible are affected equally, with males showing a predilection for occurrence in the mandible and females in the maxilla. Maxillary lesions most often involve the alveolar ridge, antrum, sinus floor, and palate. Clinical symptoms include pain, swelling, loose teeth, separation of teeth, and paresthesia.

Case: 23 year old female was referred to oral and maxillofacial department of oral health care center, Antalya, by a general dental practitioner after treating her in vain with antibiotics for dental abscess for a period of ten days. The patient presented with a complaint of a swelling on the left side of the maxillar anterior teeth region, large enough to cause her aesthetic anxiety. Her main problem was not pain, just swelling. Excisional biopsy was performed. Histological assessment was chondroblastic osteosarcoma. After 3 weeks from excisional biopsy, interestingly, her positron emission tomography was clear.therefore, one of her oncologist offered just chemotherapy where the other was suggesting hemimaxillectomy. Last treatment decision was chemotherapy after partial maxillectomy.

Conclusion: For oral malignant neoplasms, clinical and practical experience, theoretical knowledge, timing of histological assessment and treatment protocol have a vital consequential for survival and quality of life.

Keywords: chondroblastic osteosarcoma, malignant neoplasms, jaws



Coronoid Fracture Due To Impacted Third Molar Tooth: A Case Report

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Objective: Ectopic positioning of the third molar is an uncommon event. They can be displaced to ascending ramus, condylar region and coronoid process. The possible causes for the displacement can be infection, trauma and cystic degeneration of the follicle.

Case: A 68-year-old female patient referred to our hospital with the complaint of pain and limitation of mouth opening. Panoramic radiograph and CBCT images were evaluated and coronoid process fracture was observed due to an impacted third molar. The patient had swelling and pain at the relevant site. Extraction of the tooth and removal of the fractured coronoid process was performed with an intraoral approach under general anesthesia. Uneventful healing occurred without any further complaint. Patient was followed up for 6 months.

Conclusion: The coronoid resides at the anterior end of the mandibular ramus as a thin triangular process. Coronoid fracture may manifest as swelling below the zygomatic arch and soft tissue swelling and ecchymosis in the retromolar trigone region. Treatment options for coronoid fractures depend on the degree of displacement and clinical symptoms. The choice of treatment plan should be based on the type of fracture pattern, time of the fracture, the presence or absence of other concomitant fractures, and the presence or absence of severe clinical symptoms.

Keywords: Impacted Tooth, Coronoid Fracture, Trauma, Mandible Fracture



Management of asymmetry of a patient with Unilateral Condylar Hyperplasia of the Mandible

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Objective: Condylar hyperplasia of the mandible is overgrowth of the condyle, unilaterally or bilaterally, causing facial asymmetry, mandibular deviation, malocclusion. It can be diagnosed by using facial analysis, 2D-3D imaging techniques with additional bone scintigraphy and SPECT-CT. Prominent features include an enlarged mandibular condyle, elongated condylar neck and downward growth of body and ramus of mandible on affected side.

Case: A 27 years old, female patient with a history of operation for a synthetic material (silicone) implantation to the left body of mandible previously at another center, presented to our clinic in 2014 with the complaint of facial asymmetry on her left side. Body and the ramus of the mandible were asymmetrically grown on the effected side. Bone scintigraphy and 3D-CT revealed inactive growth in the left condylar process and body of the mandible. Removal of the synthetic material from the body of mandible and reduction of the basal bone was performed at the initial operation. High condylectomy for the left side was carried out in 2018 in the second session. The patient was followed up for one year in order to observe further growth of the condyler head and an osseous sliding genioplasty was performed in 2019 for the correction of residual asymmetry.

Conclusion: Condylar Hyperplasia is one of the most common causes of facial asymmetry. After proper diagnosis, treatment plan can diverse from minimal contouring and resection of the margins of the mandible, high condylectomy, low condylectomy to sagittal split osteotomies and treatment may involve multiple surgeries/orthodontic treatments.

Keywords: Condyler hyperplasia, facial asymmetry, high condylectomy



Treatment of Alveolar Bone Defect with Single Stage Surgery including Bone-Ring Technique: A Case Report

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Objective: The aim of this present case was to evaluate clinical outcomes of one-stage bonering technique with internal sinus lift surgery.

Case: A 54 year-old male was referred to School of Dentistry, due to request for dental implant treatment. In clinical examination, horizontal and vertical alveolar bone defects with soft tissue dehiscence, were observed on missing posterior maxillary molar. Radiological examination was performed on CBCT and 4-mm residual bone on vertically was measured with increased intermaxillary distance. Augmentation surgeries were planned with one-stage dental implant treatment. Firstly, the patient's venous blood was collected for CGF and i-PRF preparation. Autogenous bone-ring graft was harvested from symphisis and the socket preparation for dental implant, was done on donor site. To recipient site, alveolar bone was prepared by using trephine bur under 100 ml irrigation of sterile saline. Maxillary sinus lifting was performed and bone-ring graft material as a sticky bone and the augmentation site was covered with CGF membrane and then, a long term collagane membrane. The primary wound closure was performed with 3/0 silk suture. The follow-up of the patient was performed in 1th, 3rd and 6th months. Clinically, there was uneventfully soft tissue healing and minimally marginal bone loss on dental implant.

Conclusion: This case has a promising result on bone-ring technique following internal sinus lift surgery. Further prospective studies were recommended to analyze long-term follow-up of this augmenation technique.

Keywords: Alveolar Augmentation, Bone Ring Technique, Internal Sinus Lifting



PP-140 Trigemino-Cardiac Reflex During Harvesting of Ramus Graft

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Objective: Trigemino-cardiac reflex (TCR) is defined as the onset of bradycardia, syncope, vomiting, ectopic beats, asystole, cardiac arrhythmia, atrioventricular lock, apnea, hypotension or gastric hypermotility during mechanical stimulation of any of the sensory arms of the trigeminal nerve. TCR has been documented during skull base surgery, ophthalmic surgery, repositioning of blowout and maxillary fractures, orthognathic surgery, temporomandibular joint surgery and nasoethmoidal fractures. TCR is a rare occurrence in patients undergoing maxillofacial surgery, with a reported incidence of 1-2%. A current theoretical explanation of the reason of TCR is sensory nerve endings of the trigeminal nerve, these impulses continue in the reticular form and affect the motor nucleus of the nervus vagus.

Case: A 32 years old man with no significant medical history presented implant treatment. Due to the insufficent bone volume, it was decided to do localized alveolar ridge augmentation using block bone autografts harvested from the mandibular ramus prior to implant placement. Bradycardia developed after local anesthesia under sedation anesthesia. The heart rate immediately returned to normal after administration of 0.5 mg atropine intravenously. The surgical procedure was continued after ten minutes and the surgery was completed uneventfully.

Conclusion: TCR is usually seen during major surgical procedures such as skull base surgery, opthalmic surgery. This case shown that the development of TCR is possible during surgery.

Keywords: Bradycardia, Trigeminocardiac Reflex, Trigeminal nerve, Ramus Graft



PP-141 Dentinogenesis İmperfecta: Case Report

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Objective: The aim of this report is to present case of Dentinogenesis Imperfecta (DI) case.

Case: A 16-year-old male patient referred to our clinic due to dental caries. The patient>s medical history revealed no systemic disease. In the intraoral examination, a dentin decay was observed in the number 26 tooth and there were yellow discolorations in all teeth. Panoromic radiography which obtained from the patient showed that, obliterated pulp chamber in all teeth, rarefying osteitis in the apex of the 36,16, 17 teeth, and cervical constriction in molar teeth.

Conclusion: Patient's discoloration in the teeth, not observing the pulp chamber in all teeth, radiolucent lesions that were seen in the root apex without any effect are compatible with Dentinogenesis Imperfecta. The yellow discoloration, obliterated pulp chamber, and radiolucent lesions in the teeth consistent with the current state of DI. The early detection of the dentinogenesis is essential for preserving as much of the tooth structure of the affected teeth as possible and choosing appropriate treatment.

Keywords: dentinogenesis imperfecta(DI), discoloration, radiolucent lesion



U.S.O. (Unidentified Sinus Object) Evaluation of the Oroantral Communication resulting from the placement of a material for treatment, which is claimed to be a Bone Graft

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Objective: Oro-antral Communication and Fistula (OAC\OAF) can occur as a result of inadequate treatment. In this cases, if the defect is smaller than 2mm, spontaneous healing may occur, but larger communications should be treated correctly without delay in order to avoid sinusitis.

Case: A 35-year-old male patient reported to OMFS department of Kırıkkale University with complaint of pain in sinus and severe headaches. Patient's history revealed that the traumatic removal of his left upper 1st molar and failed primary closure of the site, which happened 5 month ago was the start of his problems. 1 week after procedure OAC occurred and became infected. Then the patient was referred to a otorhinolaryngology service in Kırşehir. The doctor inserted something to the OAC opening and then closed this wound with buccal flap. When we first received patient there was opening of this closure and underlying osseous object was easily seemed.

Conclusion: Preoperatively the affected maxillary sinus should be irrigated with normal saline and an iodine containing solution dilated with normal saline(1:1 betadine) The flap used for closure of OAF must be well vascularized and tension free. Complete closure of OAF is achieved if there no dehiscence and recurrence. For reconstruction of the hard tissue defect, if needed, the procedure should be planned with care and performed by experienced hands, followed by long and careful inspections.

Keywords: fistula, oroantral, sinus



Treatment of anterior nasal spine fracture during Le Fort I osteotomy: A case report

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Objective: Le Fort I osteotomy may lead to a variety of problems including nasal complications. Anterior nasal spine (ANS) is a protrusion of the maxilla at the base of the nose. It is important in determining the morphology of the human face as a support for the nasal tip and projection of the nose and the upper lip. A morphologically imperfect anterior nasal spine can impair the aesthetic appearance of the nose. In this case report we presented the treatment of an anterior nasal spine (ANS) fracture during Le Fort I osteotomy.

Case: A 23 year-old female patient undergone double jaw surgery for the treatment of her maxillary hypoplasia and mandibular prognathia. The ANS fractured during the advancement of the maxillary segment that was hold with wires which passed through a drilled groove under ANS. The fractured segment was repositioned to its original position by using a 3-0 monofilament suture. It healed uneventfully, and no complications occurred in the nasal tip support during a two year post-operative follow up period.

Conclusion: The ANS projection is crucial after maxillary advancement procedures. It should be protected during surgery, and when it is fractured, it should be fixed to its original position. Conventional suturing is an easy and effective method to reposition and fix a fractured ANS.

Keywords: Anterior nasal spine, Le-Fort I osteotomy, fracture



PP-144 Evaluation of dental anxiety before oral surgery in epileptic patients

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Objective: This study aimed to assess dental anxiety levels and to evaluate factors that might be associated with dental anxiety in epileptic patients undergoing oral surgery procedure.

Materials-Methods: Questionnaires were applied to epileptic patients attending the Department of Oral Surgery, 75. YI Oral and Dental Health Hospital, Ankara, Turkey, between June 2017-June 2018 before planned oral surgery procedure (n=85). The questionnaire included a Modified Dental Anxiety Scale (MDAS) and questions that might be related to dental anxiety. Participants whose MDAS score value was >=19 were considered as highly anxious. Data which also included the participants' demographic values were transferred to statistical software, and the results were examined through descriptive methods with Mann-Whitney U and Chi-square test. The level of p<0.05 was considered statistically significant.

Results: High dental anxiety level among epileptic patients participated in the study amounted to a rate of 17.6%. Dental anxiety was not related to age, type of epilepsy, seizures frequency, the frequency of drug use, number of lacking teeth, previous traumatic experience and previous oral surgery experience (p>0.05). However, the indicators of gender (p<0.01) and type of planned oral surgery operation (impacted third molar) (p<0.05) were significantly related to dental anxiety.

Conclusion: Results of the present study showed that dental anxiety before oral surgical procedures in epileptic patients is prevalent despite technical, pharmacological and surgical advances in dentistry. Implementation of anxiety identification/reducing procedures aims to increase patient comfort and optimize surgical circumstances for that kind of special patient group could be great importance.

Keywords: Dental anxiety, epilepsy, oral surgery



A Case of Granular Cell Ameloblastoma in Mandible

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Case: Ameloblastoma is a benign locally aggressive type of odontogenic tumor derived exclusively from the epithelium. Histologically, ameloblastoma is classified into many variants, of which granular cell ameloblastoma (GCA) is a rare type. Granular cell ameloblastoma occurs for 3-5% of all ameloblastoma cases. In the present case report; a 45-year-old male referred to our clinic with the complaint of pain and expansion in his left posterior mandibular region. Radiographic examination revealed a multiloculer radiolucency in this region. The lesion was resected totally with partial mandiblectomy and fibula greft was used for reconstruction.The lesion was diagnosed as granular ameloblastoma by histopathological examination. No recurrence was seen during the follow-up period of 1 year.

Keywords: Odontogenic tumor, Ameloblastoma; granular cell ameloblastoma, mandible



Volumetric Comparison Of Autogenous Bone And Tissue-Engineered Bone Replacement Materials In Alveolar Cleft Repair: A Systematic Review And Meta-Analysis

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Objective: The goal of alveolar cleft reconstruction in patients with cleft lip and palate is to improve tissue quality, structural stability, and bone volume. This study is a systematic review with meta-analysis of volumetric bone fill using autogenous bone and various tissue-engineered bone substitutes.

Materials-Methods: Electronic search on MEDLINE, EMBASE, SCOPUS, Web of Science, and grey literature was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Studies with volumetrically reported grafting outcome were included in the meta-analysis.

Results: Out of 1276 studies, 26 were included in the meta-analysis. Pooled analysis of 25 studies using autogenous bone revealed a statistically significant reduction in cleft volume equivalent to 62.0% bone fill (95% CI: 54.3, 69.6), in contrast to 10 studies using a tissue-engineered material with percentage bone filling of 68.7% (95% CI: 54.5, 82.8). The estimated pooled effect sizes across studies showed that there is no statistically significant difference between the two major intervention groups (P-value = 0.901).

Conclusion: Our statistical analysis show no significant difference between autogenous bone grafts and novel tissue-engineered materials with regard to cleft filling capability.

Keywords: cleft lip and palate, bone volume, alveolar bone grafting

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Autogenous bone groups

Author (year)	Hedges' g 95% CI SMD Lower Upper			P-value	Weight %	Hedges' g SMD and 95% CI		
Alonso et al. (2010)	-2.54	-3.94	-1.15	0.000	2.95			
Canan et al. (2012)	-2.19	-3.60	-0.78	0.002	2.91	+		
Dickinson et al. (2008)	-3.64	-5.18	-2.09	0.000	2.64			
Dieleman et al. (2004)	-0.75	-1.59	0.09	0.081	4.33			
Dissaux et al. (2016)	-2.59	-3.35	-1.82	0.000	4.53	-+∎		
Feichtinger et al. (2007)	-1.22	-1.74	-0.70	0.000	5.19	-		
Feichtinger et al. (2008)	-1.60	-2.25	-0.95	0.000	4.85	-		
Herford et al. (2007)	-1.95	-3.65	-0.26	0.024	2.38			
Homma et al. (1999)	-2.59	-3.63	-1.55	0.000	3.78			
Hudak et al. (2014)	-3.22	-4.75	-1.70	0.000	2.69	I I		
Hussain (2013)	-2.46	-3.74	-1.18	0.000	3.20			
Linderup et al. (2016)	-3.12	-3.95	-2.28	0.000	4.34			
Nagashima et al. (2014)	-1.50	-2.02	-0.97	0.000	5.18			
Neovius et al. (2013)	-0.91	-1.88	0.06	0.067	3.97			
Oberoi et al. (2009)	-2.08	-2.83	-1.33	0.000	4.57			
Oyama et al. (2004)	-1.87	-3.23	-0.52	0.007	3.03	+		
Ozawa et al. (2007)	-1.73	-2.35	-1.12	0.000	4.95	I I		
Pradel et al. (2012)	-0.78	-1.68	0.11	0.087	4.18	-∎-		
Reddy et al. (2015)	-1.04	-1.77	-0.31	0.005	4.64			
Rychlik et al. (2012)	-0.72	-0.99	-0.44	0.000	5.69			
Shawky et al. (2015)	-2.25	-3.29	-1.21	0.000	3.78	+		
Tai et al. (2000)	-1.93	-2.80	-1.06	0.000	4.25	- -		
Takemaru et al. (2016)	-2.47	-3.70	-1.25	0.000	3.33	-+ =		
Touzet-Roumazeille et al. (2015)	-1.91	-2.45	-1.38	0.000	5.14	-		
Zhang et al. (2012)	-3.38	-4.54	-2.22	0.000	3.49	_ 		
Overall (Random effects)	-1.91	-2.25	-1.57	0.000		•		

Forest plot of random effects meta-analysis summarising the standardised mean difference of the studies with regard to reduction in postoperative volume of the cleft using autogenous bone grafts. Results show significant large reductions in volume (overall SMD =-1.91, 95% CI:-2.25 to-1.57, p<0.001, I2= 77.3%).

Bone substitute materials

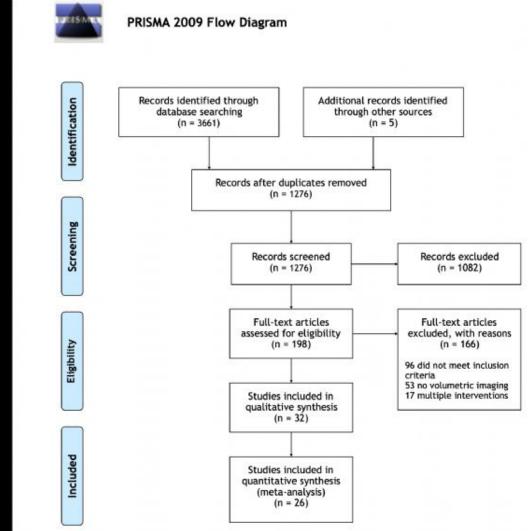
Hedges' g SMD	95% Lower	6 CI Upper	P-value	Weight %	Hedges' g SMD and 95% CI
-3.15	-4.82	-1.49	0.000	8.01	
-2.10	-3.47	-0.74	0.003	9.48	+∎-
-1.90	-3.16	-0.63	0.003	10.03	│ ┼╋─│ │ │
-4.02	-5.97	-2.07	0.000	6.80	
-1.94	-2.96	-0.92	0.000	11.41	
-0.56	-1.37	0.25	0.179	12.61	-∎}
-2.67	-4.21	-1.13	0.001	8.59	
-1.18	-2.26	-0.09	0.033	11.06	
-3.16	-4.53	-1.79	0.000	9.47	
-0.70	-1.53	0.12	0.095	12.53	-∎+
-1.95	-2.64	-1.27	0.000		
	SMD -3.15 -2.10 -1.90 -4.02 -1.94 -0.56 -2.67 -1.18 -3.16 -0.70	SMD Lower -3.15 -4.82 -2.10 -3.47 -1.90 -3.16 -4.02 -5.97 -1.94 -2.96 -0.56 -1.37 -2.67 -4.21 -1.18 -2.26 -3.16 -4.53 -0.70 -1.53	SMD Lower Upper -3.15 -4.82 -1.49 -2.10 -3.47 -0.74 -1.90 -3.16 -0.63 -4.02 -5.97 -2.07 -1.94 -2.96 -0.92 -0.56 -1.37 0.25 -2.67 -4.21 -1.13 -1.18 -2.26 -0.09 -3.16 -4.53 -1.79 -0.70 -1.53 0.12	SMD Lower Upper P-value -3.15 -4.82 -1.49 0.000 -2.10 -3.47 -0.74 0.003 -1.90 -3.16 -0.63 0.003 -4.02 -5.97 -2.07 0.000 -1.94 -2.96 -0.92 0.000 -0.56 -1.37 0.25 0.179 -2.67 -4.21 -1.13 0.001 -1.18 -2.26 -0.09 0.033 -3.16 -4.53 -1.79 0.000	SMD Lower Upper P-value Weight % -3.15 -4.82 -1.49 0.000 8.01 -2.10 -3.47 -0.74 0.003 9.48 -1.90 -3.16 -0.63 0.003 10.03 -4.02 -5.97 -2.07 0.000 6.80 -1.94 -2.96 -0.92 0.000 11.41 -0.56 -1.37 0.25 0.179 12.61 -2.67 -4.21 -1.13 0.001 8.59 -1.18 -2.26 -0.09 0.033 11.06 -3.16 -4.53 -1.79 0.000 9.47

Forest plot of random effects meta-analysis summarising the standardised mean difference of the studies with regard to reduction in postoperative volume of the cleft using bone substitute materials. Results show significant large reductions in volume (overall SMD =-1.95, 95% CI:-2.64 to-1.27, p<0.001, I2= 68.7%).





PRISMA flow diagram of the process of selection.





Survey of patients' experience of orthognathic surgery: Health related quality of life and satisfaction

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Objective: The objective of this study was to assess changes of quality of life in patients after receiving orthognathic surgical treatment at the Kuwait University Dental Clinic.

Materials-Methods: A self-administered Arabic version of the Orthognathic Quality of Life Questionnaire (OQLQ) and two different Visual Analog Scales (VAS) were used for this study.

Results: A total of 66 patients participated in the study, of them 63.6% were females and 62.1% were unmarried. The deformities were corrected by bimaxillary jaw surgery (n=55, 83.3%), Lefort I (n=6, 9.1%) and bilateral sagittal split osteotomy (BSSO) (n=5, 7.6%). The most important reason for the surgery was facial esthetics (41%) and bite correction (14%). About 94% of patients perceived better conditions post-surgery, and the satisfaction level assessed by a VAS score was 91.59%. The VAS score for general health condition significantly increased from 73 to 94% (p=0.0001). The significantly decreased OQLQ score reflected improvements in «social aspects of dentofacial deformity», «facial aesthetics», «oral function» and «awareness of dentofacial aesthetics» after the surgery (p=0.0001). Gender and marital status did not significantly affect the OQLQ scoring.

Conclusion: Overall, the patients who underwent orthognathic surgery were satisfied and had improved general health, with the satisfaction rate in the present study reflecting successful treatment.

Keywords: Orthognathic surgery, Quality of Life, facial Esthetic, Social aspects, Oral function





Table 1 Demographics information of participants.

Table 1 Demographics information of participants.

Variables	Summary statistics
Total participants	66
Age (mean \pm SD)	25.1 ± 3.9
Gender, n (%)	
Female	42 (63.6%)
Male	24 (36.4%)
Education, n (%)	
Primary/Secondary school	9 (13.6)
Diploma/Bachelor	49 (74.2)
Postgraduate degree	3 (4.5)
Did not disclosed	5(7.6)
Marital status, n (%)	
Single	41 (62.1)
Married	19 (28.8)
Did not disclosed	6(9.1)
Employment, n (%)	
Student	20 (30.3)
Employed part-time	10 (15.2)
Employed full-time	25 (37.9)
Unemployed	3 (4.5)
Did not disclosed	8(12.1)
Monthly income, n (%)	
< 500 KD	15 (22.7)
500 - 999 KD	16 (24.2)
1000 - 1999 KD	20 (30.3)
> 2000 KD	4 (6.1)
Did not disclosed	11(16.7)
Surgery type	
Bimaxillary	55(83.3)
Le fort I	6(9.1)
BSSO	5(7.6)



Table 2: Reasons for undertaking the surgery (n=66).

Table 2: Reasons for undertaking the surgery (n=66).

Variables	As a reason for undertaking the surgery n (%)*
To improve appearance of the face	53 (80.3)
To remove joint pain	18 (27.3)
To improve the bite	50 (75.8)
To improve pronunciation	25 (37.9)
To improve breathing	22 (33.3)

*Number based on the multiple choice.

Table 3 Comparison of OQLQ and VAS score before and after the surgery.

Table 3 Comparison of OQLQ and VAS score before and after the surgery.

Scales		Percentage mean(SD)	Mean differences	Р
OQOL	Befor	36.4(21.2)	19.95	0.0001
	After	16.5(10.1)		
VAS (General health %)	Befor	73.0(25.9)	20.60	0.0001
	After	93.6(8.5)		
VAS (Satisfaction level %)	After	91.6(14.4)	-	-



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Table 4: OQLQ scales score before and after the surgery.

Table 4: OQLQ scales score before and after the surgery.

OQLQ Domains	Categories	Pre mean (SD)	Post mean (SD)	Mean differences	95% CI*	p**
Oral function	6					
Gender	Male	6.29(5.48)	3.55(3.04)	2.74	1.38-4.10	0.000
Conder	Female	5.38(5.33)	2.54(2.36)	2.83	1.07-4.60	0.00
Marital status	Single	6.12(5.00)	3.41(3.11)	2.71	1.39-4.02	0.000
TATISTICUL SCORES	Married	5.37(6.29)	2.47(2.12)	2.89	0.70-5.09	0.01
Surgery type	Bimaxillary	6.16(5.37)	3.47(2.93)	2.69	1.52-3.86	0.000
Surgery type	Le fort I	3.83(6.21)	1.33(1.63)	2.50	-2.46-7.46	0.25
	BSSO	6.20(5.50)	2.20(2.20)	4.00	-0.56-8.56	0.07
Total OQLO	10330	5.95(5.40)	3.18(2.83)	2.77	1.72-3.82	0.000
Facial aesthetic		2.20(2.40)	2.10(4.07)	- + U.V	1.0.m.31.00m	0.000
Gender	Male	11.20(6.24)	4.86(3.09)	6.34	4.61-8.07	0.000
Genuer	Female	9.13(6.25)	3.75(2.95)	5.38	3.56-7.19	0.000
Marital status	Single	11.25(6.39)	4.75(3.24)	6.50	4.84-8.16	0.000
Statina Status	Married	9.47(5.91)	3.95(2.63)	5.53	3.36-7.69	0.000
Surgery type	Bimaxillary	10.99(6.21)	4.79(3.09)	6.20	4.79-7.61	0.000
Surfery type	Le fort 1	6.50(8.24)	1.83(2.23)	4.67	-1.69-11.02	0.11
	BSSO	9.20(2.28)	4.00(2.35)	5.20	1.99-8.41	0.01
Total OOLO	0330	10.43(6.28)	4.45(3.07)	5.98	4.73-7.23	0.000
Social aspects of	laformite.	10.45(0.26)	4.45(5.07)	2.20	4.75-7.65	0.000
Gender	Male	15.35(10.54)	6.47(5.13)	8.87	6.10-11.65	0.000
Genoer	Female	10.25(8.57)	4.08(3.72)	6.17	3.74-8.60	0.000
Marital status	Single	15.18(9.97)	6.32(5.10)	8.86	6.30-11.42	0.000
Matuat status	Married	12.70(10.46)	4.56(3.62)	8.14	4.43-11.85	0.000
	12083030	14.68(10.14)	6.18(4.92)	8.50	6.27-10.74	0.000
Surgery type	Bimaxillary Le fort I	3.83(5.46)		2.67	-1.41-6.74	0.15
	BSSO	12.00(8.46)	1.17(1.60) 4.60(2.51)	7.40	-0.77-15.57	0.06
Total OQLO	550	13.49(10.11)	5.60(4.78)	7.89	5.93-9.85	0.000
Awareness of faci	al deformity	15.45(10.11)	5.00(4.76)	7.05	3.93-9.63	0.000
Gender	Male	7.51(4.64)	3.78(2.87)	3.74	2.64-4.83	0.000
Clethoet	Female	4.61(4.02)	1.96(1.63)	2.65	1.47-3.83	0.000
Marital status	Single	6.61(4.80)	3.01(2.43)	3.60	2.49-4.70	0.000
Control Platos	Married	6.63(4.40)	3.26(2.98)	3.37	1.94-4.80	0.000
Surgery type	Bimaxillary		3.43(2.68)	3.65	2.71-4.58	0.000
Surfers the	Le fort l	3.83(3.49)	1.67(1.86)	2.17	0.24-4.09	0.03
	BSSO	2.87(2.13)	1.46(1.50)	1.41	0.38-2.44	0.01
Total OQLQ		6.46(4.61)	3.12(2.62)	3.34	2 53-4 15	0.000

*95%CI= 95% confidence interval of differences. **p= pair sample *t*-test at 2-tailed significant level.



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