2nd International Congress
of Azerbaijan society of Oral and
Maxillofacial surgeons

Abstract Book

12-14 October 2023
Baku Convention Center, Baku Azerbaijan

Contents

PREFACE 3

SCIENTIFIC COMMITTEE 7

SCIENTIFIC PROGRAM 9

Oral surgery/Dental implantology/Periodontal surgery [OS] 24

Plastic & Reconstructive surgery [PRS] 50

Head and Neck Oncology & Surgery [HNS] 73

Orthognathic surgery [OrS] 86

Craniofacial/Cleft lip and palate [CLP] 102

Salivary glands disorders [SG] 123

Digital Technologies in OMFS [DT] 128

TMJ disorders [TMJ] 136

OMF Trauma surgery [TS] 144

AUTHOR INDEX 151

Preface

Dear colleagues!

Azerbaijan Society of Oral and Maxillofacial Surgeons, officially began its activity in 2017, is an institution that currently unites more than 300 of the most advanced specialists working in this field in our country. In addition to other tasks performed by the society, it has set itself the goal of discussing the possibilities of international cooperation, as well as the views on the development prospects of this field together with world experts.

Several international events have already been held in this direction. Among them, in 2018, the International Scientific Forum dedicated to the Presentation of Society with leading experts representing 11 countries. In 2019, the 1st International Scientific Congress of the Society representing 15 countries under the slogan "Building a better future" at the Baku Congress Center. We introduced you to the materials and results of that event (www.2019az-omfs.az)

The 2nd International Scientific Congress of our Society on October 12-14, 2023 is significant in that this event is dedicated to the 100th anniversary of the Great Leader Heydar Aliyev, and this event is confirmed to be the largest among the events held in the field of health in 2023. So, since the European (EACMFS) and International (IAOMS) Societies provide scientific support to this Congress, the world's most influential experts came to Baku and share their knowledge and experience with the Congress participants and our experts. The world's most famous speakers from 30 countries (among them the presidents of International, European, Asian organizations, as well as heads of professional societies of neighboring countries - Turkey, Russia, Central Asian countries, etc.), hundreds of participants from our country and abroad participated in the event. For this reason, the Congress was described with the slogan "Expand the boundaries of cooperation".

The Scientific Program of the Congress included the specialty of oral and maxillofacial surgery as well as allied branches of surgery, such as plastic and reconstructive surgery, head and neck oncology and otorhinolaryngology.

The rich Program of the Congress included 185 scientific-research works: they were presented in plenary lectures, symposia, oral presentations, as well as in poster presentations and in the form of abstracts. Moreover, during the Congress, the Mentor Hour of Professor Jatin Shah from the USA, the world's most advanced head and neck surgeon, was organized.

We present the Abstract Book and hope that they will be useful in your scientific and practical activities.

President of the Congress **Prof. Chingiz Rahimov**

Prof. Dr. Chingiz Rahimov

Hörmətli həmkarlar!

2017-ci ildən rəsmi fəaliyyətə başlayan Azərbaycan Ağız və Üz-Çənə Cərrahları Cəmiyyəti hazırda ölkəmizdə bu sahədə çalışan 300-dən çox ən qabaqcıl mütəxəssisləri birləşdirən bir qurumdur. Cəmiyyət yerinə yetirdiyi digər vəzifələrlə yanaşı, beynəlxalq əməkdaşlıq imkanlarını, həmçinin bu sahənin inkişaf perspektivlərinə dair baxışlarını dünya mütəxəssisləri ilə birlikdə müzakirə etməyi özünə məqsəd qoyub.

Artıq bu istiqamətdə bir neçə beynəlxalq tədbirlər keçirilib. Onlardan:

-2018-ci ildə 11 ölkəni təmsil edən qabaqcıl mütəxəssisləri ilə Cəmiyyətin Təqdimatına həsr olunmuş Elmi Forum.

-2019-cu ildə Bakı Kongres Mərkəzində "Daha yaxşı gələcək quraq" şüarı altında 15 ölkəni təmsil edən mütəxəsisslərin iştrakı ilə keçirilən Cəmiyyətin 1-ci Beynəlxalq Elmi Konqresi. Konqresin Materialları və yekunları ilə Sizi tanış etmişdik (www.2019az-omfs.az)

12-14 oktyabr 2023-ci il tarixlərində keçirilən Cəmiyyətimizin 2-ci Beynəlxalq Elmi-Praktiki Konqresi onunla əlamətdardır ki, bu tədbir Ulu Öndər Heydər Əliyevin 100 illiyinə həsr edilmiş və 2023-cü ildə səhiyyə sahəsində keçirilən tədbirlər arasında ən irimiqyaslı olduğu kimi tanınıb. Belə ki, ixtisasımıza aid Avropa (EACMFS) və Beynəlxalq (IAOMS) Cəmiyyətləri bu Konqresə elmi dəstəyini verdiyindən dünya səviyyəsində ən nüfuzlu mütəxəssislər Bakıya gələrək öz bilik və təcrübələrini Konqres iştirakçıları ilə və bizim mütəxəssislərlə bölüşüb. "Əməkdaşlıq sərhədlərimizi genişləndirək" şüarı altında keçirilən bu tədbirdə 30 ölkədən dünyada ən tanınmış məruzəçiləri (onlar arasında Beynəlxalq, Avropa, Asiya təşkilatlarının prezidentləri, eləcə də qonşu ölkələrin- Türkiyənin, Rusiyanın, Orta Asiya ölkələrinin peşəkar Cəmiyyətlərinin rəhbərləri və s.), yüzlərlə ölkəmizdən və xaricdən iştirakçılar qatılmışdır.

Konqresin Elmi Proqramı Ağız və üz-çənə cərrahiyyəsi ixtisası ilə yanaşı qonşu peşə sahələrini də əhatə edirdi: plastika və rekonstruksiya cərrahiyyəsi, baş və boyun onkologiyası və Otorinolarinqologiya.

Konqresin zəngin Elmi Proqramına 185 elmi-tədqiqat işi daxil edilmişdir. Bunlar plenar məruzələrdə, simpoziumlarda, açıq çıxışlarda səsləndi, eləcə də poster nümayişlərində və tezis şəklində təqdim edilmişdir. Həmçinin, Konqres zamanı dünyanın ən qabaqcıl baş boyun cərrahı ABŞ-dən olan professor Jatin Şahın Mentor Saatı təşkil olunmuşdur.

AzOMFS-un 2-ci Beynəlxalq Elmi-Praktiki Konqresinin Elmi Proqramın Materiallarını təqdim edərək ümid edirik ki elmi-praktiki fəaliyyətinizdə Sizə olduqca faydalı olacaq.

Hörmətlə,

Konqresin Prezidenti

Professor Çingiz Rəhimov

Prof. Dr. Chingiz Rahimov

Уважаемые коллеги!

Азербайджанское общество челюстно-лицевых хирургов, официально начавшее свою деятельность в 2017 году, является учреждением, объединяющим в настоящее время более 300 самых передовых специалистов, работающих в этой области в нашей стране. Помимо других задач, решаемых обществом, оно поставило перед собой цель обсудить возможности международного сотрудничества, а также взгляды на перспективы развития этой сферы совместно с мировыми экспертами.

В этом направлении уже проведено несколько международных мероприятий.

Среди них в 2018 году Международный научный форум, посвященный «Презентации общества», с участием ведущих экспертов, представляющих 11 стран мира. В 2019 году в Бакинском Конгресс-Центре прошел 1-й Международный научный конгресс Общества, представляющего 15 стран, под лозунгом «Построение лучшего будущего». Мы ознакомили вас с материалами и результатами этого мероприятия (www.2019az-omfs.az).

II Международный научно-практический конгресс нашего общества, который состоялся 12-14 октября 2023 года, знаменателен тем, что оно было посвящено 100-летию Великого лидера азербайджанского народа Гейдара Алиева, и получило подтверждение как крупнейшее научное событие среди мероприятий, проводимых в сфере здравоохранения в 2023 году. Поскольку Европейское (EACMFS) и Международное (IAOMS) общества оказали научную поддержку этому Конгрессу, самые известные мировые лекторы приехали в Баку и поделились своими знаниями, а также опытом с участниками Конгресса и нашими специалистами. Конгресс, прощедший под лозунгом «Расширяем границы сотрудничества», собрал специалистов из более чем 30 стран, среди которых были Президенты Международного, Европейского, Азиатского Обществ, а также главы профессиональных организаций соседних стран - Турции, России, стран Центральной Азии и др., местные научные организации, специализирующиеся в данной области.

Научная программу Конгресса составили различные направления хирургии полости рта и челюстно-лицевой области, а также смежные профессии: пластическая и реконструктивная хирургию, онкология головы и шеи, оториноларингология.

Насыщенная программа Конгресса включала 185 научно-исследовательских работ: они были представлены в пленарных лекциях, симпозиумах, устных докладах, а также в стендовых докладах и в виде тезисов. Также в рамках Конгресса был организован «Час наставника» профессора Джатина Шаха из США, ведущего в мире специалиста в области хирургии головы и шеи.

В данном сборнике мы представляем Материалы Научной Программы и надеемся, что они будут полезны в вашей научной и практической деятельности.

С Уважением,

Президент Конгресса

Профессор Чингиз Рагимов

Prof. Dr. Chingiz Rahimov

Scientific Commitee

Prof. Aliyev A.J. (Azerbaijan)
Prof. Rahimov Ch.R. (Azerbaijan)
Prof. Mustafa Sancar Ataç (Turkiye)
Prof. S.M. Balaji (India)
Prof. Christos Perisanidis (Greece)
Prof. Manlio Galie (Italy)
Dr. Alejandro Martinez (Mexico)
Prof. Yusubov Y.A. (Azerbaijan)
Prof. Galandar V.M. (Azerbaijan)
Prof. Panahian V. M (Azerbaijan)
Dr. Hasanov J.H. (Azerbaijan)
Dos. Farzaliyev İ.M. (Azerbaijan) – scientific secretary
Dr. Haciyeva G.İ. (Azerbaijan) – technical secretary

Scientific Program

Day 1. 12.10.2023

08:00 09:00	Registration							
Auditorium Plastic & Reconstructive surgery			Hall B4 Oral surgery / Dental implantology			Hall B2 Special session Head and Neck Oncology		
Chairperson Prof. Edgar Biemer (Germany)			Chairperson - Prof. Mustafa Sancar Ataç (Turkiye), Dr. Jabbar Hasanov (Azerbaijan)			Chairperson - Akad. Evgeny Choynzonov (Russia), Prof. Ali Madunov (Russia)		
09:00 09:30	Prof. Mohammad Sartawi (Jordan/UK)	Reconstructive Surgery in Cranio Maxillofacial Region for Congenital Deformities	09:00 09:20	Dr. İvana Petrovic (USA)	Oral rehabilitation of the cancer patient	09:00 09:15	Dr. Mahammad Davudov (Azerbaijan)	Using of different reconstruction methods in patients with oral cancer
						09:15 09:30	Prof. Rafik Rzayev (Azerbaijan)	Anterior craniofacial resection for tumors of the sinonasal tract and orbit
09:30 10:00	Prof. S.M. Balaji (India)	Calvarial reconstruction with frontal & superior orbital rim moulding	09:20 09:40	Prof. Christos Perisanidis (Greece)	Zygomatic and pterygoid implants for management of severe maxillary atrophy			
						09:30 09:45	Dr. Marco Tomarchio (İtaly)	Impact of the SARS-CoV-2 pandemic on the diagnostic delay of oral carcinoma: a retrospective analysis
10:00 10:30	Emeka Nkenke (Austria)	The role of distraction osteogenesis in oral and maxillofacial surgery	09:40 10:00	Prof. Rolf Ewers (Austria)	Bone Gain with Extra-SHORT® Implants Due to Functional Load			
						09:45 10:00	Dr. Rauf Miskirli (Azerbaijan)	Transnasal endoscopic approach to management of sinonasal and intracranial tumors
			10:00 10:20	Dr. Fatih Mehmet Coskunses (Turkiye)	Full-arch Immediate Implant Solutions in the Maxilla			
			10:20 10:30	Dr. Toghrul Aliyev (Azerbaijan)	Regeneration of bone in dental implantation	10:00 10:15	Prof. Ibrahim Yıldırım (Turkiye)	Surgical Treatments of Head & Neck Tumors: A Fifty Years ` of Techniques
						10:15 10:30	Prof. Namik Amaraliyev (Azerbaijan)	Soft tissue reconstruction for Head and Neck ablative defects
10:30 10:45	Panel discussion		10:30 10:45	Panel discussion		10:30 10:45	Panel discussion	
10:45 11:15	Coffee break		E-poster			Exhibition		

Day 1. 12.10.2023

Auditorium – Head and Neck Oncology			Hall B4 – Oral surgery / Dental implantology			Hall B2 – Cleft lip and palate		
Chairperson - Prof. Robert A Ord (USA)			Chairperson - Prof. Mohammad Sartawi (Jourdan/UK), Dr. Emil Imanov (Azerbaijan)			Chairperson prof. Yunus Yusubov (Azerbaijan), Dr. Aleksandr İvanov (Russia)		
11:15 11:45	Prof. Jatin Shah (USA)	Staging for oral cancer, current problems and future strategies	11:15 11:35	Prof.Mustafa Sancar Ataç (Turkiye)	Surgical strategies in severely atrophied maxillae prior to dental implants	11:15 11:30	Dr. Daria Anashkina (Russia)	Is it possible to achieve the perfect nose shape after primary cheilorhinoplasty In cleft lip and palate patients?
						11:30 11:45	Dr. Mixail Katashev (Russia)	Surgically assisted rapid maxillary expansion: retrospective analysis of complications 2015-2023
11:45 12:15	Prof. Christos Perisanidis (Greece)	Contemporary surgical management of advanced oral cancer	11:35 11:55	Dr. Nicholas Kalavrezos (UK)	The FORTE flap: Fibula (based) oral rehabilitation tissue engineered	11:45 12:00	Dr. Grigory Karachunskii (Russia)	Autotransplantation of the lower premolar with simultaneous bone grafting of the alveolar process as a way to restore the dentition in patients with congenital clefts of the upper lip, alveolar process and palate
12:15 12:45	Prof. Aziz Aliyev (Azerbaijan)	Epidemiology of head and neck cancer in Azerbaijan Republic and the experience of the National Oncology Center in the treatment of this group of patients.	11:55 12:15	Dr. Francesco Lemma (Italy)	Management of Atrophied Maxilla: Zygomatic Implants vs Other Techniques			
			12:15 12:35	Dr. Elvin Melikov (Russia)	Distraction osteogenesis. Preprosthetic rehabilitation of patients with extensive defects of the jaws	12:00 12:15	Dr. Galina Dyugay (Russia)	Features of using MARPE to achieve successful palatial expansion of maxilla
			12:35 12:50	Dr. Leyla Nadirova (Azerbaijan)	Digital workflow integration onto implant surgery. Advantages of implant crowns prepared CAD/CAM technology.	12:15 12:30	Dr. Alan Bagaev (Russia)	Evaluation of the stability of maxillary distraction osteogenesis in adult patients with cleft lip and palate
12:45 13:00	Panel discussion		12:50 13:00	Panel discussion		12:30 13:00	Panel discussion	
13:00 14:00	Lunch break		E-poster			Exhibition		

Day 1. 12.10.2023

Auditorium - Plastic & Reconstructive surgery			Hall B4 – Oral surgery / Dental implantology			Hall B2 - Maxillofacial Trauma		
Chairperson - Prof. Edgar Biemer (Germany)			Chairperson - Prof. Rolf Ewers (Austria), Dr. Rovshan Mammadov (Azerbaijan)			Chairperson: Prof. Mustafa Sancar Atac (Turkiye), prof. Galandar Canbaxıshov (Azerbaijan)		
14:00 14:30	Dr. Satheesh Prabhu (UK)	Reducing the impact of surgery-Wisdom tooth surgery to Harvesting of Scapula Flap	14:00 14:20	Dr. Adham Khasanov (Uzbekistan)	Osteonecrosis of the upper jaw after the use of desomorphine and their rehabilitation	14:00 14:20	Dr.Vladimir Mikhaylyukov (Russia)	Modern aspects of surgical treatment of patients with post-traumatic defects and deformities of the middle zone of the face
						14:20 14:40	Prof. Mohammad Sartawi (Jordan/UK)	Post Traumatic Craniomaxillofacial Reconstruction,
14:30 15:00	Prof. İbrahim Yıldırım (Turkiye)	Easy From A Distance, But Difficult Closely: In the Surgical Treatments of the Cases of Orbital and Periorbitale Region	14:20 14:40	Dr.Burak Saydam (Turkiye)	Keratocysts by Decompression Management of Mandibular Large Odontogenic	14:40 15:00	Aleksey Dikarev (Russia)	Early microsurgical reconstructions of ballistic trauma of the face
15:00 15:30	Prof. Klaus Dieterich Wolff (Germany)	Microvascular tissue transfer: Problems solved and challenges remaining	14:40 15:00	Prof. Nik Kantaputra (Thailand)	Strange Teeth, Strange Gum, and their Implications	15:00 15:20	Prof. İrshat Yuldashev (Kyrgyzstan)	Experience of the midfacial zone injuries treatment
			15:00 15:20	Prof.Mustafa Ercüment Önder (Turkiye)	Biomimetic Dental Implants; Design, Production, In vivo and Invitro Results	15:20 15:40	Umit Ertash (Turkiye)	Management of Maxillofacial Trauma in Emergency
15:30 15:45	Panel discussion		15:20 15:45	Panel discussion		15:40 15:45	Panel discussion	
15:45 16:15	Coffee break		E-poster			Exhibition		

Day 1. 12.10.2023

Auditorium - Plastic & Reconstructive surgery			Hall B4 – Oral surgery / Dental implantology			Hall B2 – Rare cases in head and neck surgery		
Chairperson - Klaus Dieterich Wolff (Germany)			Chairperson - Prof. Hakan Tuz (Turkiye), Dr. Elçin Abbasov (Azerbaijan)			Chairperson: Prof.Mustafa Ercüment Önder (Turkiye), Prof. İrshat Yuldashev (Kyrgyzstan)		
16:15 16:45	Prof. Edgar Biemer (Germany)	Face Reconstruction - from skin transplants to total face transplantation	16:15 16:35	Prof. Wolf D. Grimm (Germany)	Innovative methods of PRP application in Periodontology and Dental Implantology	16:15 16:30	Aleksey Dikarev (Russia)	Reduction of the inferior wall of the orbit with transposition of soft tissues as the most optimal surgical method for the treatment of endocrine ophthalmopathy
						16:30 16:45	Dr. Aleksey Dikarev (Russia)	Migraine surgery. Medical and social problem outside the USA and Europe.
16:45 17:15	Prof. Julio Acero (Spain)	Mandibular reconstruction. State of the art.	16:35 16:55	Prof. Gunaseelan Rajan (India)	Dynamic navigation for Zygoma implant fixture placement	16:45 17:00	Dr. Elnur Akbarov (Azerbaijan)	Atypical skull-base osteomyelitis
						17.00 17:15	Prof. Peter Sieg (Germany)	Rare facial clefts clinical findings and surgical management
			16:55 17:15	Prof. Abibilla Kalbayev (Kyrgystan)	Orthopedic rehabilitation of patients after reconstructive operations in the maxillofacial region.	17:15 17:30	Dr. Elvin Melikov (Russia)	Experience with distraction osteogenesis in patients with malocclusion complicated by transversal anomalies. Analysis of complications
			17:15 17:35	Dr. Jabbar Hasanov (Azerbaijan)	The role of CBCT in the successful Sinus Lift surgery			
17:45 18:00	Panel discussion		17:35 18:00	Panel discussion		17:45 18:00	Panel discussion	
18:00 19:00	Opening ceremony, welcome reception, concert							

Day 2. 13.10.2023

08:00 09:00	Registration							
Auditorium - Orthognathic surgery			Hall B4 – Plastic & Reconstructive surgery			Hall B2 – Special session-Azerbaijan Society of Oral Implantologists - Challenges in dental implantology		
Chairperson - Prof. Rui Fernandes (USA)			Chairperson – Prof. Jürgen Hoffmann (Germany), Prof. Vagif Qalanadar (Azerbaijan)			08:00-10:20 Chairperson – Prof. Hakan Tuz (Turkiye), Dr. Jabbar Hasanov (Azerbaijan)		
08:00 08:30	Prof. Mustafa Sancar Ataç (Turkiye)	Importance of malar projection in skeletal class III dentomaxillofacial deformities	08:00 08:20	Prof. Andrey Andreishchev (Russia)	Facial aesthetic proportions restoration	08:00 08:10	Dr. Agil Huseynov (Azerbaijan)	The influence of different hypoglycemic agents on per-implant bone in patients with diabetes
						08:10 08:20	Dr. Elçin Abbasov (Azerbaijan)	Prosthodontic Principles in Dental Implantology
08:30 09:00	Dr. Alejandro Martinez (Mexico)	Mandibular stability in class II anterior open bite patients with temporomandibular disorders, treated with bimaxillary counterclockwise rotation and arthrocentesis	08:20 08:40	Dr. Nigar Sultanova (Azerbaijan)	Azerbaijani facial soft tissue thickness database for craniofacial reconstruction.	08:20 08:30	Dr. Guliyev Vidadi (Azerbaijan)	Neurological problems in implantology and the ways to solve them
09:00 09:30	Prof. Manlio Galie (Italy)	New paradigms or old principles: current concepts in orthognathic surgery	08:40 09:00	Prof. Vagif Galandar (Azerbaijan)	Our surgical approach to cosmetic and reconstructive head-neck and facial surgery	08:30 08:40	Dr. Emil Imanov (Azerbaijan)	Treatment planning of implants in the aesthetic zone
						08:40 08:50	Dr. Vuqar Gurbanov (Azerbaijan)	Local complications in dental implant surgery: prevention and treatment

Day 2. 13.10.2023

09:30 10:00	Prof. Gunaseelan Rajan (India)	Anterior maxillary segmental distraction in cleft hypoplasia	09:00 09:30	Prof. Jean Poul Meningaud (France)	The deep plane facelift: Strength and weaknesses	08:50 09:00	Dr.Rauf Jafarov (Azerbaijan)	The important factors for a successful immediate implant placement and immediate loading
						09:00 09:10	Dr. Rovshan Mammadov (Azerbaijan)	The new approaches and techniques in Transcrestal sinus floor elevation. Sinus elevation without grafts
						09:10 09:20	Dr. Hikmat Bakhishov (Azerbaijan)	Peri-implant tissue texture. İmportance soft tissue augmentations on dental implant survivor
						09:20 09:30	Dr. Nizami Gayibov (Türkiye)	Subperiosteal implants as a solution for atrophic jaws rehabilitation
						09:30 09:40	Dr. Akif Guliyev (Azerbaijan)	Sinus-lift procedure in challenging cases
			09:30 10:00	Prof. Jean Poul Meningaud (France)	A case series of 7 face transplant: the long-term follow-up	09:40 09:50	Dr. Vüsal Tahirov (Azerbaijan)	Guided Bone Regeneration in Implant Dentistry
						09:50 10:00	Dr. Rafiq Ibrahimov (Azerbaijan)	Selective design of soft tissue flaps for easy surgical access in fully impacted maxillary third molars extraction.
10:00 10:20	Panel discussion		10:00 10:20	Panel discussion		10:00 10:20	Panel discussion	
10:20 10:50	Coffee break		E-poster			Exhibition		

Day 2. 13.10.2023

Auditorium – Salivary gland & Digital Technologies in Medicine and OMFS			Hall B4 – Cleft lip and palate			Hall B2- ENT		
Chairperson -Dr. Satheesh Prabhu (UK)			Chairperson - Prof. Reha Kisnisci (Turkiye), Prof. Vitomir Konstantinovic (Serbia)			Chairperson – Prof. Aziz Talishinski (Azerbaijan), Prof. Nazim Huseynov (Azerbaijan)		
10:50 11:20	Prof. Robert Ord (USA)	Controversies in the management of pleomorphic adenoma of the salivary glands	10:50 11:10	Dr. Alexander Ivanov (Russia)	Moscow Cleft Treatment Protocol	10:50 11:05	Prof. Vefa Panahian (Azerbaijan)	Cholesteatoma of the middle ear
11:20 11:50	Dr. Sajjad Walji (Netherlands)	Clinical outcomes and experiences in the treatment of Benign Parotid Tumours" A Ten-year experience in a single center	11:10 11:30	Prof. İbrahim Yıldırım (Turkiye)	The Treatment of the "Cleft Lip Nose Deformity" and Personal Technique	11:05 11:20	Dr. Nilufar Usmanova (Uzbekistan)	Features of the technique of adenoidectomy for Eustachian tube dysfunction
						11:20 11:35	Dr.Elnur Akbarov (Azerbaijan)	Endoscopic endonasal surgery in the pediatric population
						11:35 11:50	Dr. Arif Mammadov (Azerbaijan)	Our experience in dealing with choanal atresia
11:50 12:20	Prof. Javier Lagunas (Spain)	Patient oriented simulation programs in facial surgery	11:30 11:50	Prof. Yunus Yusubov (Azerbaijan)	Medico-social rehabilitation and quality of life of the cleft lip and palate patients	11:50 12:05	Dr. Parviz Aslanov (Azerbaijan)	Modern view on revision rhinoplasty and the role of the equipment in rhinoplasty and latest innovations
12:20 12:50	Prof. Peter Sieg (Germany)	Microsurgical submandibular gland transfer in cases of severe Keratoconjunctivitis sicca	11:50 12:10	Elvin Melikov (Russia)	Multidisciplinary approach in the treatment of patients with TMJ disorders	12:05 12:20	Dr. Elif Huseynzadeh (Azerbaijan)	New approach for preservation rhinoplasty "Alpha Rhinoplasty"
			12:10 12:30	Prof. Emre Benlidayı (Turkiye)	Mandibular distraction osteogenesis in newborns with Pierre Robin Syndrome	12:20 12:35	Dr. Mazair Guliev (Azerbaijan)	Revision Rhinoplasty
						12:35 12:50	Dr. Talat Shafiyev (Azerbaijan)	Nasal reconstruction using with the dorsal hump
12:50 13:00	Panel discussion		12:50 13:00	Panel discussion		12:50 13:00	Panel discussion	
13:00 14:00	Lunch break		E-poster			Exhibition		

Day 2. 13.10.2023

Auditorium - Head and Neck Oncology			Hall B4 – TMJ disorders			Hall B2 – Resident session		
Chairperson - Prof. Jatin Shah (USA)			Chairperson – Prof. SM Balaji (India), Prof. Alper Alkan (Turkiye)			Chairperson – Prof. Ibrahim Yildirim (Turkiye), Prof. Yunus Yusubov (Azerbaijan)		
14:00 14:30	Dr. Nicholas Kalavrezos (UK)	Pearls and Tips for the comprehensive management of bone sarcomas of the head and neck	14:00 14:20	Dr. Alejandro Martinez (Mexico)	Condylar resorption vs. adaptation posterior to bimaxillary CCW in the presence of TMJ pathology without TMJ surgery	14:00 14:10	Rez. Kushvar Seyidova (Azerbaijan)	Management of the modern war ballistic trauma in maxillofacial regions
						14:10 14:20	Rez. Surayya Isgandarova (Azerbaijan)	Surgical Strategies in Parotid Gland Tumors: Antegrade and Retrograde Approaches
						14:20 14:30	Rez. Zaher Sakkal (Azerbaijan)	Effect of upper eyelid blepharoplasty on corneal astigmatism in patients with dermatochalasis
14:30 15:00	Dr. Satheesh Prabhu (UK)	Scapula flap - new techniques and better outcome in head and neck malignancies	14:20 14:40	Prof. Vitomir Konstantinovic (Serbia)	Temporomandibular joint ankylosis comprehensive treatment	14:30 14:40	Dr.Gullu Guliyeva (Azerbaijan)	3D approach to classification of the defects and deformities of the facial skeleton
						14:40 14:50	Dr. Nijat Gasimov (Türkiye)	Changes in Body Mass Index (BMI) Following Orthognathic Surgery
						14:50 15:00	Ruslan Zharilkassimov (Kazakhstan)	Restoration of perforation of the Maxillary Sinus using autotransplantat
15:00 15:30	Prof. Robert A Ord (USA)	Evidence Based Management of the N0 neck in Oral Cancer	14:40 15:00	Dr. Nikolai Redko (Russia)	Biodegradable structures based on magnesium alloys for osteosynthesis in medicine - development and prospects for use	15:00 15:10	Dr. Islam Kazimli (Türkiye)	Investigation of perioperative effects of different hypotensive anesthesia techniques in orthognathic surgery
			15:00 15:20	Prof. Dr. Sırmahan Çakarer (Turkiye)	Biomaterials used in TMJ Ankylosis: from the past to future	15:10 15:20	Rez. Oumar Youssouff Ibrahim (Chad)	Evaluation of healing time after simple tooth extraction
						15:20 15:30	Rez. Emin Ramaznov (Azerbaijan)	Our approach to the rhinochelioplasty for patients with unilateral secondary cleft lip deformities
			15:20 15:40	Dr. Dmitry Shipika (Russia)	Discopexy in complex treatment of patients with TMJ disorders	15:30 15:40	Dr. Ali Fattahov (Turkiye)	A retrospective evaluation of demographic and clinical features of alveolar cleft repair in patients with cleft lip and palate
15:30 15:45	Panel discussion		15:40 15:45	Panel discussion		15:30 15:45	Panel discussion	
15:45 16:15	Coffee break		E-poster			Exhibition		

Day 2. 13.10.2023

Auditorium – Mentor hours			Hall B4 – Cleft lip and palate			Hall B2 – Plastic surgery & Cosmetology		
Chairperson - Prof. Aziz Aliyev (Azerbaijan)			Chairperson – Prof. Christos Perisanidis (Greece), prof. Umar Tairov (Tajikistan)			Chairperson Prof. Mohammad Sartawi (Jordan/UK), Prof. Vefa Panahian (Azerbaijan)		
16:15 17:45	Prof. Jatin Shah (USA)	Evolution of Neck dissection	16:15 16:35	Prof. Reha Kisnisci (Turkiye)	Revision Surgery - cleft lip / nose	16:10 16:25	Dr. Zarif Atayeva (Azerbaijan)	Surgical facial harmonization
	Video	Supraomohyoid neck dissection	16:35 16:55	Prof. Krisztian Nagy (Hungary)	Cleft surgery and dysgnathia surgery	16:25 16:40	Dr. Adil Jumshudov (Azerbaijan)	New approaches in the mid-facelift in combination with other aesthetic surgeries of the face
						16:40 16:55	Dr. Dilgam Mammadov (Azerbaijan)	Endoscopic aesthetic facial surgery
	Video	Superficial parotidectomy	16:55 17:15	Dr. Mahir Aliyev (Azerbaijan)	My philosophy on surgical treatment of cleft lip	16:55 17:10	Dr. Vugar Alekperov (Azerbaijan)	Indications to invasive and non-invasive methods in total facial and neck lifting
						17:10 17:25	Dr. Rashid Əliyev (Azerbaijan)	Camouflage of the nasal tip by the "swap" technique
	Video	Excision of deep parotid tumor	17:15 17:35	Prof. Abdurahman Eshiyev (Kyrgyzstan)	Types and stages of surgical operations performed on Congenital cleft of the upper lip, alveolar process and palate	17:25 17:40	Rena Soltanova (Azerbaijan)	Nonsurgical Profiloplasty: Sculpting the Future of Facial Aesthetics with Minimally Invasive Techniques
						17:40 17:55	Dr. Robert Guryanov (Russia)	"Computer-assisted technologies in maxillofacial surgery: our experience"
17:45 18:00	Panel Discussion		17:45 18:00	Panel Discussion		17:55 18:00	Panel Discussion	
20:00	Gala dinner							

Day 3. 14.10.2023

08:00 09:00	Registration							
Auditorium – OMFS/ENT / Digital Technologies in Medicine and OMFS			Hall B4 – Orthognathic surgery			Hall B2 – Special session Guest Society (ICMFS) - Challenges in OMFS		
Chairperson - Prof. Peter Sieg (Germany)			Chairperson – Prof. Ilshad Yuldashev Dr. Emre Benlidayı (Turkiye)			Chairperson – Prof. Chingiz Rahimov (Azerbaijan), Prof. S.M. Balaji (India)		
08:00 08:30	Prof. Mohammad Sartawi (Jourdan)	The Role of Maxillofacial Surgeon in The Treatments of Obstructive Sleep Apnea	08:00 08:20	Prof. Sıdıka Sinem Akdeniz (Turkiye)	Strategies for the Surgical Treatment of Mandibular Asymmetry	08.00 08.30	Prof. Jean Paul Meningaud (France)	Facial féminisation surgery: 10-year experience
08:30 09:00	Prof. Francesco Saverio De Ponte (Italy	New diagnostic approach to Eagle Syndrome	08:20 08:40	Dr. Evgeny Sviridov (Russia)	Surgical features in class II patients to improve aesthetic and functional outcome	08.30 08.50	Dr. İvana Petrovic (USA)	Long term functional and esthetic outcomes after fibula free flap reconstruction of the mandible
09:00 09:30	Dr. Erol Cansiz (Turkiye)	Orthognathic Surgery for the management of Obstructive Sleep Apnea	08:40 09:00	Dr. Ahmet Emin Demirbaş (Turkiye)	ERAS Protocol in Orthognathic Surgery	08:50 09:10	Prof. Mustafa Sancar Ataç (Turkiye)	Total prosthetic replacement of TMJ in adults with type IV ankylosis
09:30 10:00	Prof. Julio Acero (Spain)	Computer assisted surgery in midfacial oncologic surgery and reconstruction	09:00 09:20	Dr. Elvin Melikov (Russia)	Acromegaly as a cause malocclusion. Systematization and treatment algorithm	09:10 09:30	Dr. Sajjad Walji (The Netherlands)	Cosmetic Otoplasty
						09:30 09:50	Prof. İqor Reshetov (Russia)	National experience in Interdisciplinary approach in H&N pathology
						09:50 10:10	Prof. S.M. Balaji (India)	Management of Orbital dystopia
			09:20 09:40	Prof. Abdurahman Eshiyev (Kyrgystan)	The experience Osh Interregional United Clinical Hospital in performing of Orthognathic surgery			
			09:40 10:00	Dr. Berat Serdar Akdeniz (Turkiye)	Smile first concept for 3-Dimensional orthognathic surgery planning			
10:00 10:20	Panel Discussion		10:00 10:20	Panel Discussion		10:10 10:20	Discussion about 33rd World Congress of ICMFS in Baku 2025	
10:20 10:50	Coffee break		E-poster			Exhibition		

Day 3. 14.10.2023

Auditorium – Orthognathic Surgery/TMJ			Hall B4 – Head and Neck Oncology			Hall B2 – OMFS Department AMU		
Chairperson - Prof. Manlio Galie (Italy)			Chairperson – Prof. Klaus Dieter Wolff (Germany), Akad. İqor Reshetov (Russia),			Chairperson- prof. Mustafa Sancar Atac (Turkiye), prof. Eldar Qasımov (Azerbaijan)		
10:50 11:20	Prof. Altan Varol (Turkiye)	Alloplastic Total Joint Replacement for End-Stage TMJ	10:50 11:10	Prof. Michail Kropotov (Russia)	Reconstruction of the mandible in cases of primary and secondary tumors	10:50 11:00	Dr. Sahib Bilalzadeh (Azerbaijan)	Different approaches In management of hemangiomas of the maxillofacial region
						11:00 11:10	Dr. Farman Hasanov (Azerbaijan)	A new approach in management of orbital adherence syndrome
						11:10 11:20	Dr. Tamraz Guliyev (Azerbaijan)	How could we influence the wound healing process of oral mucosa?
11:20 11:50	Prof.Dr. Alper Alkan (Turkiye)	Temporoman-dibular joint ankylosis and its surgery	11:10 11:30	Prof. Julio Acero (Spain)	Tumors of the Cranio-orbital region: A Tumors of the Cranio-orbital region: A comprehensive approach from diagnosis to reconstruction	11:20 11:30	Dr. Shahin Guliyev (Azerbaijan)	Treatment of masticatory muscle hypertrophy with botulinum toxin type A
						11:30 11:40	Dr. Elnur Abdullayev (Azerbaijan)	Optimizing Management of Pediatric Jaw Fractures: Mitigating Complications for Enhanced Outcomes
						11:40 11:50	Dr. Gunel Hajieva (Azerbaijan)	Assessment of orbital morphology In patients with craniofacial abnormalities for improvement of outcomes of their surgical management.

Day 3. 14.10.2023

11:50 12:20	Prof. Jürgen Hoffmann (Germany)	Innovative Approaches for Midfacial Reconstructions	11:30 11:50	Prof. Ali Madunov (Russia)	Modern principles of total prosthetic substitution of TMJ in patients with tumors	11:50 12:00	Dr. Vugar Aliguliyev (Azerbaijan)	Features of "Shedule of diseases" items using at the medical examination of conscripts
			11:50 12:10	Prof. Riaz Warraich (Pakistan)	Head and Neck Oncology; A real challenge	12:00 12:10	Dr. Kenan Amiraliyev (Azerbaijan)	Virtual surgical planning for oral soft tissue reconstruction with submental island flap
						12:10 12:20	Dr.Elchin Ahmedov (Azerbaijan)	New laboratory markers in diagnosis of osteoarthrosis of TMJ
						12:20 12:30	Dr.Rashad Mamedzadeh (Azerbaijan)	Complication of Blepharoplasty: prevention and management
12:20 12:50	Prof. Hakan Tüz (Turkiye)	Pitfalls and Challenges in the Management of Maxillomandibular Asymmetry	12:10 12:30	Prof. Othman Al Twaigi (Saudi Arabia)	Maxillofacial tumors treatment and reconstruction - are we providing the ultimate treatment?	12:30 12:40	Dr.Tural Mammadov (Turkiye)	Retrospective evaluation of pterygomaxillary separation patterns in Le Fort I osteotomy
12:50 13:20	Prof. Burcu Baş (Turkiye)	Temporomandibular Joint Arthrocentes is and Intraarticular Injection Techniques				12:40 12:50	Dr. Sabrin Ali Azim (UAE)	A Synergistic Strategy for Augmenting Maxillofacial Trauma
			12:30 12:50	Akad. Evgeny Choynzonov (Russia)	Modern Trends in Oral Cavity Reconstruction	12:50 13:00	Dr. Fariz Mammadov (Azerbaijan)	Otoplasty: Procedure & Recovery
						12:00 13:10	Dr. Parvin Hasanova (Azerbaijan)	Surgical wound healing in periorbital region
13:20 14:00	Panel Discussion		12:50 13:00	Panel Discussion				
14:00 14:00	Lunch break		E-poster			Exhibition		

Day 3. 14.10.2023

Auditorium - Plastic & Reconstructive surgery			Hall B4 – Orthognathic surgery/ Plastic & Reconstructive surgery			Hall B2 – ENT		
Chairperson - Dr. Nicholas Kalavrezos (UK)			Chairperson –Prof. Altan Varol (Turkiye), Dr. Alejandro Martinez (Mexico)			Chairperson – Prof. Rafiq Rzayev (Azerbaijan), Prof. Vafa Panahiyan (Azerbaijan)		
14:00 14:30	Prof. Nik Kantaputra (Thailand)	Strange Teeth, Strange Gum, and their Implications	14:00 14:20	Dr.Nur Altıparmak (Turkiye)	The Efficacy of the Partial Glossectomy in Orthognathic Surgery	14:00 14:15	Dr. Elnur Akbarov (Azerbaijan)	Our experience in endoscopic dacryocystorhinos-tomy
						14:30 14:45	Dr.Aydın Talishinsky (Azerbaijan)	The Magic of Inferior Turbinate Reduction: How I Do It?
14:30 15:00	Prof. Andrey Andreishchev (Russia)	Our experience with difficult syndromes correction	14:20 14:40	Dr. Pavel Golovonev (Russia)	Pediatric craniofacial surgery. A Moscow experience	14:45 15:00	Dr. Mazair Guliev (Azerbaijan)	Our osteotomy management in rhinoplasty.
15:00 15:30	Dr. Zygmunt Stopa (Poland)	Transoral endoscopically assisted management of the mandibular condylar fractures	14:40 15:00	Dr. Dilgam Magarramov (Azerbaijan)	Secondary Rhinoplasty	15:00 15:15	Dr. Parviz Aslanov (Azerbaijan)	Shaping the Nose Tip in Rhinoplasty, Nasal Tip Surgery. What has changed
			15:00 15:20	Dr. Mahir Aliyev (Azerbaijan)	Algorithmic approach in nasal reconstruction	15:15 15:30	Dr.Selin Celebi (Turkiye)	Does Subspinal Le Fort I Osteotomy Affect the Nasal Airway Volume? A Prospective Study
			15:20 15:40	Dr. Teymur Quliyev (Russia)	My approach for primary rhinoplasty	15:30 15:45	Dr.Ramil Hashimli (Azerbaijan)	Surgical treatment of anterior glottic web
15:30 16:00	Panel Discussion		15:40 16:00	Panel Discussion		15:45 16:00	Panel Discussion	
	Closing Ceremony							

Registration
Plenary session
Opening ceremony
E-poster
Masterclass
Gala dinner
Exhibition
Oral Presentations
Closing ceremony
Lunch break
Coffe break

Symposium - Oral surgery / Dental implantology / Periodontal surgery
Symposium - Cleft lip and palate
Symposium - TMJ disorders
Plastic -Plastic and Reconstructive surgery
Symposium - Head an neck oncology
Symposium - Orthognathic surgery

Abstracts

Oral surgery
Dental implantology
Periodontal surgery [OS]

[OS 01]

Prosthodontic Principles in Dental Implantology.

Abbasov E.

Department of Prosthodontics of Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Oral presentation

Non-surgical methods have been the main treatment option in the restoration of partial and complete edentulism. Over time, with the increase in the functional and aesthetic needs of patients, more advanced methods began to be introduced. In modern dentistry, implants play a major role in the restoration of edentulism. Placement of the implant during the surgery depends not only on surgical indications, but also on the construction to be determined by the prosthodontist. This article covers the prosthodontist's decision on the type of construction (prosthesis?) and implant selection according to the patient's functional and aesthetic needs and etc. during the restoration of edentulism.
Type of prosthesis - implant type, number, diameter, location, mandibular or maxillary area, augmentation procedures, diameter of implants, type of connection and abutment to be used, condition of bone and soft tissues around the implant, amount of resorption, condition of movable and fixed tissues, anatomical and morphological factors are such details should be considered and discussed with the prosthodontist. When deciding on the type of implant-stabilised prostheses, the factors listed above that may affect planning must be taken into account. In addition to these, the patient's financial situation and general health should also be taken into account. Implant surgery is a prosthetic indication!

[OS 02]

Features of dental status in patients, undergone COVID – 19.

Abdumomunova A., Shayakhmetov D., Kydykbaeva N., Smanalieva D., Smanaliev M.

Course of Therapeutic dentistry, S. B. Daniyarov Kyrgyz State Medical Institute of Advanced and Postgraduate Training, Biodent Clinic, Bishkek, Kyrgyz Republic.

Presentation type – E-poster

COVID-19 - dangerous disease occurring in the form of an acute respiratory viral infection. The virus able to infect as direct infection or through the body's immune response, is able to bind to the ACE-2 molecule and expressed on the epithelial cells of the oral mucosa. There is no yet reliable data to support this version. The aim of the study was to investigate the dental status, oral mucosa diseases manifestations in patients who had a coronavirus infection when planning maxillofacial surgery treatment. Research results and conclusions. The study involved 34 patients: 22 men and 12 women aged 40-65 years, planned for inpatient treatment. Clinical studies carried out taking into account the main manifestations of COVID - 19, most of which are respiratory disorders that affect the general or local anesthesia choice. Loss of smell sense and disappearance of taste sensitivity, bad breath detected in 98% of the studied. Candidiasis (carrier) was determined in 45% of the examined, clinical symptoms of candidiasis (burning, odor, dry mouth) determined in 20%. Symptoms observed as infection secondary manifestations, or as side effects from medications (antibiotics). In 18% of cases, a number of inflammatory processes observed in the oral cavity of patients – hemorrhagic ulcers, recurrent aphthous-like lesions, ulcerative-necrotic gingivitis. Due to the short-term observation, it was not possible to establish whether the identified symptoms are associated with a weakening of the body protective functions, immunity decrease or the direct virus pathological effect, the massive use of medications. Therefore, it is advisable to include a dentist's examination in the list of necessary consultants for COVID-19, as part of an interdisciplinary team to support critical patients.

[OS 03]

Orthopedic rehabilitation of patients after reconstructive operations in the maxillofacial region.

Abdysamatov B., Kalbaev A.

Department of Orthopedic Stomatology, I.K. Akhunbaev Kyrgyz State Medical Academy. Bishkek, the Kyrgyz Republic.

Presentation type – Symposium

Despite the active development of medical technologies and preventive measures the prevalence of cancer increases. Malignant neoplasms of the maxillofacial region

account for about 5% of all human malignancies. Postoperative defects create difficulties in prosthetics. Replacement of extensive face defects presents significant difficulties due to a following: complex anatomical and topographic conditions of the recipient zone; complications caused by radiation therapy, difficult access for visual inspection of the operating site. Therefore, the question arises about the quality of manufactured post-resection prostheses. In Kyrgyzstan, there are no statistical data on the number of surgical interventions in the maxillofacial region requiring orthopedic rehabilitation.
The aim of the study: identify the percentage of patient satisficed wearing face post-resection prostheses. Examination methods: all patients accepted for orthopedic treatment examined clinically, instrumental methods, a photo protocol and a questionnaire at the Department of Orthopedic Dentistry. I.K. Akhunbaev KSMA. In total, 24 patients 11 men and 13 women, were examined and accepted for orthopedic treatment, 13 people with defects in the lower jaw and 12 people in the upper jaw. The average age of patients is 49 years, the oldest is 74 years, and the youngest is 18 years. All patients were informed and gave their consent to participate in this study.
Results: Post-resection prostheses made in the amount of 13 for the lower jaw, 11 for the upper jaw. Based on the survey and questioning, the following results were obtained: on the first day, 85% of patients were satisfied with wearing the prosthesis, after a week 62%, and after a month 80%. Today, the issue of prosthetics after jaw resection is acute, because the main task of doctors is not only the elimination of the disease, but also an acceptable, unburdening life after surgical interventions. It needs more study and observation. Thus, study revealed 80% satisfaction with wearing a post-resection prosthesis.

[OS 04]

Evaluation of the effects of platelet-rich fibrin on the new bone formation after the tooth extraction in the mandible, by histomorphometry.

Aliyev T., Rizaj X., Shahin O., Şimşek F., Mammadov C.

Azerbaijan Medical University, Azerbaijan, Baku,

Albanian university, faculty of stomatology, Department of Oral and Maxillofacial surgery.
İzmir Katip Çelebi University, İzmir, Türkiye.

Presentation type – Symposium

Background - Platelet concentrate products are frequently used in recent years to accelerate tissue healing due to the high growth factor they contain. There are many studies evaluating the effects of thrombocyte rich fibrin constructs on tissue healing. The aim of this study was to evaluate the effect of platelet rich fibrin on new bone formation obtained by the protocol at 1300 rpm in 14 min after tooth extraction in the mandibula by histomorphometry analysis.

Aims/Objectives - Our aim in this research to see effect A- prf+ in bone regeneration and compared with a normal healing of the bone
Methods - 16 patients who applied to the Department of Oral and Maxillofacial Surgery, Faculty of Dentistry in Azerbaijan Medical University, who had indications of at least 2 teeth extractions in the lower jaw and following dental implantation after the healing process in the extraction sites were included in this study. Immediately after tooth extraction, extraction sockets were standardized with 3,7x10mm sized drills then advanced platelet rich fibrin plus (A-PRF+) were applied into the extraction sockets for preservation. But the control group was allowed to recover naturally without applying anything. After applying A- PRF+ to the extraction socket, it was waited for 8 weeks and then samples were obtained for histomorphometric evaluation with trephine burs from the extraction site where the implants planned to be placed. 10 weeks waited for osseointegration prior to prosthetic rehabilitation.
Results/Findings - In our study, PNCA expression was compared; PNCA expression in A-PRF + treated defects were significantly higher than in the control group ($p = 0.001$). The results of this study showed that the amount of new bone tissue in the control group was 32.68% at the end of the 8th week and 61.37% in the A-PRF + group. In the statistical analysis, the difference between the A-PRF + group and the control group were statistically significant.
Conclusions - Histological evaluations showed that platelet concentration products significantly increased bone healing statistically. It was determined that in the group where A-PRF+ were applied alone, the formation of new bone was higher than in the control group.

[OS 05]

Surgical strathegies in severly athrophied maxilla prior to dental implants

Atac M.S.

Gazi University, Ankara, Türkiye

Presentation type - Symposium

Severely atrophic maxilla is one of the most challenging clinical situations for the surgeons before implant placement. Today in the 3D printing era the patient specific custom implants are popular, however there is still a need for restoring the maxilla by bonevolume enhancement, especially in young individuals, for long term functional and aesthetic stability.
In this presentation the surgical strategies for those purposes with the authors published techniques will be discussed including augmentation techniques.

[OS 06]

Peri-implant tissue texture. İmportance soft tissue augmentations on dental implant survivor.

Bakhishov H.

"AzDent" Clinic, Baku, Azerbaijan.

Presentation type - Oral presentation

Background: The peri-implant soft tissue phenotype (PSP) encompasses the keratinized mucosa width (KMW), mucosal thickness (MT), and supracrestal tissue height (STH). Numerous approaches to augment soft tissue volume around endosseous dental implants have been investigated.
Methods: A comprehensive search was performed to identify clinical studies that involved soft tissue augmentation around dental implants and reported findings on KMW, MT, and/or STH changes.
Conclusions: Bilaminar approach involving CTG or ADM obtained the highest amount of MT gain, whereas APF in combination with FGG was the most effective technique for increasing KMW. KMW augmentation via APF was associated with a significant reduction in probing depth, soft tissue dehiscence and plaque index, regardless of the soft tissue grafting material employed, whereas bilaminar techniques with CTG or CM showed beneficial effects on marginal bone level stability.

[OS 07]

Full-arch Immediate Implant Solutions in the Maxilla.

Coskunses F.M.

Istanbul Health and Technology University Faculty of Dentistry, Istambul, Türkiye

Presentation Type – Symposium

Treating maxillary atrophy with immediately loaded implants is a challenging task. A patient-specific and comprehensive approach is necessary for immediately loaded dental implant treatment of maxillary atrophy. The surgical plan depends on the condition of both hard and soft tissues and patient-related factors. This presentation will thoroughly discuss the decision-making process, including the number and placement of dental implants and the use of remote anchorage zygomatic implants, with the guidance of maxillary atrophy

[OS 08]

New dynamic Fem modeling in modeling of implants.

Demirbaş A.E., Ekici R., Demirbaş M.D., Gayıbov N.

Erciyes University, Kayseri, Türkiye

Presentation type – E-poster

Background - The effects on bone and implant were examined by dynamic analysis in this study.
Aims/Objectives - To present a method for numerical modeling of the effect occurring during implant loading. To learn the effect that occurs on both the implant and the bone during implant loading.
Methods - There are many studies in which the effects on implants and bone were investigated with FEM (Meijer et al. 1994; DeTolla et al. 2000; Geng et al. 2001; Deck et al. 2004; Staden et al. 2008; Hasan et al. 2014). However, in these studies, only the effects of forces on the bone or the implant were examined. In this study, the effects on both the bone and the implant were examined by dynamic analysis. In numerical modeling, dynamic analysis was used with ABAQUS/Explicit and Python programs. In the numerical modeling of the implant and bone structure, there are 85,543 elements for the bone model and a total of 31,384 elements for the implant model. The element type chosen in modeling is R3D4 for implant and C3D8R for bone. In order to optimize the accuracy of the numerical analysis and the solution time, a convergence test for mesh optimization was carried out and thus the optimum element was determined. In numerical modeling, the Poisson ratio of the cortical bone was taken as 0.323, Young's modulus as 14.5 GPa and density as 1100 kg/m3. The Poisson ratio of spongy bone was taken as 0.3, Young's modulus as 1.37 GPa and density as 270 kg/m3. The Johnson-Cook plasticity model was used to predict the elasto-plastic behavior of cortical and cancerous bones. Additionally, the ductile damage initiation criterion was used for implant damage behavior Meijer HJA, Starmans FJM, Steen WHA, Bosman F. 1994. Location of implants in the interforaminal region of the mandible and the consequences for the design of the superstructure. J Oral Rehabil. 21(1):47–56. DeTolla DH, Andreana S, Patra A, Buhite R, Comella B. 2000. The role of the finite element model in dental implants. J Oral Implantol. Geng JP, Tan KB, Liu GR. 2001. Application of finite element analysis in implant dentistry: A review of the literature. J Prosthet Dent. Deck C, Nicolle S, Willinger R. 2004. Human head FE modelling: Improvement of skull geometry and brain constitutive laws. In Proceedings of the 2004 International IRCOBI Conference on the Biomechanics of Impact, Staden RCV, Guan H, Johnson NW, Loo Y-C, Meredith N. 2008. Step-wise analysis of the dental implant insertion process using the finite element technique . Clin Oral Implants Res. Hasan I, Heinemann F, Bourauel C. 2014. Biomechanical finite element analysis of self-tapping implants with different dimensions inserted in two bone qualities. Biomed Eng/Biomed Technik.
Results/Findings - Both bone and implant were successfully modeled and simulated using FEM. Thus, dynamic numerical modeling was performed to determine the effects occurring during implant loading.
Conclusions - In light of all assumptions and information, dynamic finite element

analysis of both the implant and the bone was performed. Thus, without any experimental testing, the effects on the bone were determined according to the amount of advancement during implant loading

[OS 09]

Effectiveness of tunnel bone grafting in reduction of the external cortical lamella in the anterior region of the upper and lower jaw.

Drobyshev A.Y. Klipa I.A. Popova Y.V.

FSBEI HE A.I. Yevdokimov MSMSU MOH Russia

Presentation type – E-poster

Background - Reduction of the external cortical lamella in the anterior region of the upper and lower jaw is a result of a long term orthodontic treatment or/and significant change in insicors's inclination. Also it may be a personality trait – «thin bone biotype».
Aims/Objectives - 1.Determination of the effectiveness of tunnel bone grafting as a method of preventing periodontal diseases after orthodontic treatment. 2.Determination differences in results on upper and lower jaw.
Methods - Studied data of patient's computed tomography T0: Prior to tunnel bone grafting, T1: Immediately following tunnel bone grafting T2: 6 months after operation.
Results/Findings - Tunnel bone grafting is an effective technique prevention periodontal disease after orthodontic treatment. Rate of the effective higher in the upper jaw than in the lower. This is due to bone structure's differences.
Conclusions - Tunnel bone grafting is an effective technique prevention periodontal disease after orthodontic treatment. Rate of the effective higher in the upper jaw than in the lower. This is due to bone structure's differences.

[OS 10]

Bone Gain with Extra-SHORT® Implants Due to Functional Load.

Ewers R., Morgan V.J., Marincola M., Perpetuin P.

University Hospital of Cranio-Maxillofacial and Oral Surgery, CMF Institute Vienna, Austria

Presentation type - Symposium

We report 13 years of experience with SHORT® and extra SHORT® Bicon implants in the extremely atrophic maxilla, mandible and in Fibula grafts. All patients have been treated with CAD/CAM produced metal free hybrid fiberglass-resin TRINIA® prostheses. Our cohort includes by now 67 patients, mostly treated with 5.0 mm extra SHORT®

implants. Only 4 have been not osseointegrated or lost. In accordance with Wolff's law, we observed bone gain even in the implants that were splinted. Due to these successful results, we changed our restorative method of supporting prostheses from four implants to three implants. In the maxilla, we place the middle implant in the incisive foramen and the nasopalatinal canal. In very atrophic maxilla cases we also insert sometimes extra SHORT® implants into the Tuberosity of the maxilla. In conclusion we can state that the SHORT® and extra SHORT® implants we have used, should be functional loaded. Some implants even show crestal bone gain under functional load. In the fibula grafts we observe distinct bone remodeling around the implants and of the whole transplanted fibula cortex due to functional load.

[OS 11]

Rehabilitation of advanced atrophic jaws with subperiosteal implant.

Gayibov N., Bilge S., Demirbaş A.E.

Erciyes Universiteti, Kayseri, Türkiye

Presentation type – Oral presentation

Bone transfer techniques such as symphysis, ramus, and iliac bone are the gold standard in advanced atrophied jaws. At the same time, external sinus lift and xenogeneic bone transfer techniques are among the operations performed before dental implant surgery in atrophied jaws. Treatment of atrophied edentulous patients with contraindications in terms of systemic diseases and subjective reasons Zygoma and subperiosteal implants are less invasive methods used for non-releasable stable constructs in non-receiving patients.
Aims/Objectives - The aim of this thesis is to evaluate the aesthetic and functional outcome of subperiosteal implants in patients who are not suitable for further surgical procedures for a non-stable construction due to systemic reasons.
Methods-A 51-year-old female patient applied to our center with a complaint of toothlessness. After clinical and radiological examinations, it was reported that there is atrophy in the mandibular bone and the importance of the forward block bone transfer procedure for dental implant surgery. The patient did not accept the proposed treatment for subjective reasons. A copy of the Medical CT obtained from the patient was used in the Mimicis program to obtain a 3D model of the area where a special titanium implant would be prepared. The locations of the fixation screws with the implant were determined and designed according to the condition of the bone. The guide was prepared according to the finished design. The patient-specific titanium implant was produced from titanium with a metal scribe using laser sintering technology.
Results/Findings - The proposed new method, which is more technologically advanced, is not intended to replace standard dental implants, but to provide a one-step alternative treatment option for patients whose bone and soft tissue quantity and quality are not suitable for a traditional endosseous implant, thus providing multiple options such as bone grafting. In such cases, subperiosteal implants can be an

alternative treatment method. It is a developing procedure; however, its use should be widespread. More clinical trials and observational studies are needed.
Conclusions - After the rehabilitation, no problems were seen in the radiological films taken from the patient and in the intraoral examination, and the aesthetic and functional restoration of the tooth was completed.

[OS 12]

Innovative methods of PRP applications in Periodontology and Dental Implantology.

Grimm W.D.

Witten/Herdecke University, Periodontology, School of Dental Medicine, Faculty of Health, Witten, Germany.

Presentation type - Symposium

When we started working with autologous blood plasma in minimally invasive Regenerative Periodontology and Implantology about 5 years ago, we quickly realized that not all PRP is created equal. At the same time, my clinical team and I had more than 15 years of clinical experience in the successful use of minimally invasive procedures. We had begun using these methods clinically in 2000 as part of the Minimally Invasive Regenerative Periodontology and Implantology Curriculum we developed. Autologous blood plasma quickly emerged as a serious option for a variety of indications in Regenerative Periodontology and Implantology. A key to this appears to be the activation of calcium ions, which represent factor IV in the blood coagulation cascade. Plasma consists not only of growth factors, but also to a large extent of fibrin and platelets, which in combination with coagulation factors form one of the most complex enzymatic systems in our organism. In our concept, we try to harness the great potential of blood coagulation to biologically stabilize particulate augments for a variety of clinical indications. In our lecture we will demonstrate this concept using a clinical case. We mainly use “ARGON K3Pro Rapid and Sure Implants” in minimally invasive Regenerative Implantology.
In general, our current clinical research focuses on adult (somatic) stem cells and the regulation of their basic biological properties, including differentiation, proliferation, and migration. We are particularly interested in the effects of pro- and anti-inflammatory signals on ecto-mesenchymal stem cells (precursors of bone, adipose and cartilage tissue) and oral-derived neural crest-derived cells (precursors of e.g. pigment cells and bone in the head region).

[OS 13]

Sinus-lift procedure in challenging cases.

Guliyev A.H., Ahmedov E.T., Farzaliyev I.M.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Oral presentation

Introduction. Long-lasting adentia of posterior maxillae leads to severe atrophy of the alveolus. This usually requires performing of sinus-lift procedure. In cases of pneumatic type of maxillary sinus, the anatomy of maxillary sinus could be unusual and associated to bonny septa and deep invaginations into interradicular space. The aim of current study is to improve surgical outcomes of sinus-lift procedures in such challenging cases.
Materials and methods. Current study was performed in Department of Oral and Maxillofacial surgery, Azerbaijan Medical University on 14 patients. All patients underwent clinical examination. Additionally, CBCT of all patients was obtained. The main criteria of assessment were thickness of inferior and lateral walls of sinus, the wight of sinus, presence of septa, the shape of inferior wall of sinus, presence of acanthoid septa and their exact localization. All patients underwent sinus-lift procedure with different modifications.
Results. No significant complications occurred. In 9 patients dental implant placement was done immediately; in the rest 5 patients on the 2nd step surgery. In 11 patients' septa was found on lateral wall of sinus, in 3 patients on medial wall; in 5 patients' deep invagination of Schneiderian membrane was found in interradicular space, in 2 patients arachnoid septa was found on the bottom of sinus.
As opposed to single chamber maxillary sinus all procedures were done by two-window approach. This maneuver allows to elevate Schneiderian membrane on the both surfaces of septa, thus avoid perforation. In 5 patient deep invagination was successfully managed by accurate dissection from this space. In 2 patients after circumferential dissection of mucosa, arachnoid septa were detached from it's base and elevated together with membrane upwards.
Conclusions. Sinus-lift procedure in multi chamber maxillary sinus associated to unusual bonny septa requires double-window approach supplemented by accurate dissection of mucosal membrane according to existing anatomy.

[OS 14]

Retensiya olunmuş dişlərin çıxarılmasının planlama xüsusiyyətləri

Guliyev A.H., Ahmedov E.T., Guliyev S.B.

Ağız və üz-çənə cərrahiyyəsi kafedrası, Azərbaycan Tibb Universiteti, Azərbaycan, Bakı.
Aktuallıq: Kliniki göstərişlərə görə retensiya olunmuş dişlərin çıxarılması üçün cərrah kliniki sütuasiyanı düzgün təhlil etməli və onların çıxarılmasının çətinlik dərəcəsini tə-

yin etməlidir. Əməliyyat uzunmüddətli, çox çətin və ağırlaşmalarla müşayət oluna bilər. Əməliyyat zamanı xəstələrdə aşağı alveol sinirinin zədələnməsi halları ola bildiyi üçün xəstələrdə uzun müddət diskomfort qeyd olunur. Müasir tədqiqatlar aşağı 3-cü molyarların çıxarılmasından sonra 13% hallarda sinirin zədələnməsini göstərir. Çənə kanalının yerləşməsinin panoram rentgenoqrafiya ilə təyin edilməsi artıq mükəmməl və obyektiv hesab edilmir. Tədqiqatın məqsədi CBCT (Cone Beam Computed Tomoqraphy) istifadəsi ilə retensiya olunmuş aşağı 3-cü molyarların çıxarılması əməliyyatının planlaşdırılmasıdır.
Material və metodlar. Aşağı 3-cü molyarların köklərinin çənə kanalında yerləşməsini panoram rentgenoqrafiyanın köməyi ilə təyin edilən 36 xəstədə CBCT müayinəsi aparılmışdır. Nəticədə 16 xəstədə diş kökü zirvəsi ilə sinir kanalı arasında nazik sümük arakəsməsinin olması, 7 xəstədə sinirin köklərin arasından keçməsi, 8 xəstədə diş kökünün təzyiqi nəticəsində mandibulyar kanalın deformasiya olması və daralması, 5 xəstədə isə diş kökünün qövsvari əyilərək sinirin altına keçməsi təyin edilmişdir. Həmçinin 17 xəstədə panoram rentgenoqrafiyada görünməyən əlavə köklər və onların əyri istiqamətləri təyin edilmişdir. Müayinənin nəticəsinə əsasən xəstələrin əməliyyat planında və metodikasında dəyişikliklər edilmişdir. Mandibulyar sinirin zədələnməsi riski çox olan xəstələrə öncədən maarifləndirmə aparılıb və əməliyyatdan sonra travmatik neyropatiyanın müalicəsi üçün əlavə medikamentoz və fizioterapevtik müalicənin tətbiq edilməsi tövsiyyə edilmişdir.
Nəticələr. Tədqiqat qrupunda olan 36 xəstənin retensiya olunmuş 3-cü molyarların çıxarılması əməliyyatının CBCT müayinəsi ilə planlamasından sonra 24 xəstədə əməliyyat metodikasında dəyişiklik edilmişdir və hər diş fərdi yanaşma ilə çıxarılmışdır. Əməliyyatdan sonrakı dövrdə 4 xəstədə alt dodağın hissəvi paresteziyası qeyd edilmişdir. Aparılan medikamentoz müalicədən sonra bir xəstədə dodağın hissiyatı 10 gündən sonra, digərlərində isə 2 aya yaxın dövrdə bərpa olunmuşdur. Retensiya olunmuş 3-cü molyarların çıxarılması üçün onların köklərinin forması və yerləşməsi, aşağı alveol siniri ilə münasibətini CBCT-nin köməyi ilə təyin etməklə optimal cərrahi əməliyyat planlamaq olur. Bu da öz növbəsində hər bir dişin fərdi yanaşma ilə çıxarılmasını, əməliyyatın az invaziv olmasını və əməliyyatın ağırlaşma riskinin azalmasını təmin edir.

[OS 15]

How could we influence the wound healing process of oral mucosa?

Guliyev T.R.

Department of Maxillofacial surgery, Clinical Medical Center, Baku, Azerbaijan.

Presentation type – Oral presentation

Background - Wound healing remains an important and actual problem of modern medicine. There a great number of publications related to facial skin surgery as well as mechanisms affecting the healing of skin wounds after the operation and the methods of treatment. However, the studies related to the healing process of surgical wounds in the oral cavity, and the search for effective diagnostic and treatment methods are rarely found in the literature.
Aims/Objectives - Our goal was to investigate the impact of resveratrol drug on the

healing of wounds during the post-surgical time in the oral cavity.
Methods - Methods A clinical study was conducted on 60 patients, who were divided into the main and control groups. In the control group, traditional treatment methods were used, while in the main group, the drug resveratrol was used.
Results/Findings - Results It was revealed that on the 3rd day after the surgery, the light pink color of the peri-wound tissues in the patients of the main group who received resveratrol reached 70%, whereas in the control group, it was 16.7%. The average pain score in the control group was 46.7%, while in the main group, it was 60%. On the 7th day of wound healing, mild swelling in the main group was 60%, compared to 26.7% in the control group. Microcirculatory changes were assessed using laser Doppler fluorimetry. Microcirculation levels on the 3rd day in the main group were 9.06 perfusion units, whereas in the control group, it was 7.55 perfusion units. On the 7th day of healing, microcirculation levels in the main group were 9.19 perfusion units, and in the control group, it was 7.95 perfusion units.
Conclusions - Conclusion The effectiveness of the proposed resveratrol drug in the healing of surgical wounds in the oral cavity was confirmed.

[OS 16]

Local Complications in dental implant surgery: prevention and treatment.

Gurbanov V.

Absheron District Central Hospital, Baku, Azerbaijan.

Presentation type – Oral presentation

The purpose of this article is to identify the types of complications that have been reported in conjunction with endosseous root form implants and associated implant prostheses. The complications were divided into the following 6 categories: surgical, implant loss, bone loss, peri-implant soft tissue, mechanical, and esthetic/phonetic. Since many of these complications are easily diagnosed on postsurgical images, it is important for radiologists to be familiar with them and to be able to recognize and diagnose them. Radiologists should also have a basic understanding of their treatment. Lastly, we will review pertinent dental anatomy and important structures that are vital for radiologists to evaluate in postoperative oral cavity imaging.

[OS 17]

The role of CBCT in the successful Sinus Lift surgery.

Hasanov J.

Implant-Dent clinic, Baku, Azerbaijan.

Presentation type - Symposium

Abstract: If we describe the Sinus Lift surgery in a simple form it consists in opening the window on the Lateral wall, lifting the Schneiderian membrane and filling the sinus floor.

What should we pay attention in order to perform these procedures or what obstacles may arise when opening a window on the Lateral wall and filling the sinus floor?

Let's a closer look to the sinus anatomy with CBCT.

- Investigation over the entire cutting line of the thickness of bone window area that will close the window on the lateral wall
- Determination of localization and size of arteries and their anastomoses on the lateral wall
- The relationship of tooth roots apical with the sinus and their health status in the sinus region
- Relief of the sinus floor
- Sinus septa, its direction, height, thickness and etc.
- Inflammatory processes in the sinus cavity
- Ostium, its dimensions, distance from the sinus floor
- Determination of the quantity and quality of alveolar bone under the sinus floor
- Schneiderian membrane, its thickness and health status
- Bucco-palatal dimensions of Maxillary Sinus
- Any changes that may occur in the Maxillary Sinus

These examinations performed during sinus surgery will be explained on individual cases during the presentation.

[OS 18]

The influence of different hypoglycemic agents on per-implant bone in patients with diabetes.

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Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Oral presentation

The rate of dental implant failure is quite high in people with diabetes. The influence of hypoglycemic agents on peri-implant variables among type 2 diabetes mellitus patients is still unclear.
Therefore, the aim of this study was to assess the radiographic and clinical parameters around implants in patients using different hypoglycemic agents.
In this study, we reviewed the medical records and analyses of 24 dental implant patients with type 2 diabetes who used metformin, or glucagon-like peptide-1 (GLP-1) drugs. All patients received implants between 2019 and 2020, with the same initial status, and all the prosthesis restorations were cement-retained ceramic crowns. The peri-implant marginal bone levels were evaluated by periapical radiographs immediately after implant placement and at 1 and 2-year follow-up visits.
The studies included a comparison of digital radiographic examination of the peri-implant bone density and clinical parameters. 24 patients received 67 dental implants. In the first year after implantation, peri-implantitis was detected on 3 implants in 2 patients who were using metformin, and in 1 patient periimplantitis on 2 implants who were using GLP-1.
After a review of medical records and XR, the peri-implant marginal bone loss in the GLP-1 drug group was smaller than in the metformin group. Only 19 patients with 58 implants completed the 2-year follow-up.
The clinical research and radiographic variables were not exactly the same among the patients with different hypoglycemic agents at both the 1 and 2-year follow-ups. More studies are needed to verify the direct effect of these drugs on peri-implant bone.

[OS 19]

Advantages of using an intraoral scanner for prosthetics on dental implants.

Ibrahimov R., Farajov E., Yusubov A., Aliyeva M., Aliyev B.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Oral presentation

An accurate impression of the implant is an important requirement for the preparing of implant prostheses. This study evaluated the accuracy of digital impressions using intraoral scanner (IOS) systems compared with conventional impressions.
Purpose. The purpose of the study was to determine the effectiveness of using an intraoral scanner (IOS) for prosthetics on dental implants with partially edentulous jaws in comparison with traditional methods.
Materials and methods: This study was analyzed on prosthetic protocols of 40 patients with partial adentia. For all patients were installed 2-3 dental implants. In 20 patients, digital scan posts and intraoral scanner (Ranyes) were used to make impressions. The remaining 20 patients were treated by traditional method with impression using standard transfers, standard impression and individual trays and impression materials (C-silicone).
Results. There was a general trend toward digital impressions providing more accurate results in terms of accuracy and precision. The results of the analysis showed that in the group of patients where IOS was used, the time for fabricate of crowns on implants was significantly reduced. In 12 patients (60%) where the traditional method was used, a vomiting reflex was observed, which was not observed in any of the patients in the group using IOS.
Conclusion: Use the IOS may reduce the time of prosthetics on dental implants, improves the quality of treatment procedures for patients and increases clinical efficiency.

[OS 20]

Selective design of soft tissue flaps for easy surgical access in fully impacted maxillary third molars extraction.

Ibrahimov R., Farajov E., Yusubov A., Aliyeva M., Aliyev B.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Oral presentation

Various types of soft tissue flaps are used for surgical extraction of partially and completely unerupted third molars in both jaws are detailed described in modern litera-

ture. However, the final choice remains on surgeon, considering his skill, experience and local anatomical features of the patient's oral cavity and jaw bone in the surgical area.

Purpose. Reduce the degree of trauma of soft and bone tissues surrounding the impacted maxillary third molar while maintaining optimal surgical access and visualization.

Materials and methods. A comparative analysis of using various types of soft tissue flaps was carried out on 23 patients in age 13 to 25 years, where 39 maxillary third molars were removed. 21 of them are the teeth with formed roots and 18 are the germs of teeth. Some patients came with one tooth extracted and some (children) were recomended to delay the extraction, awaiting coronal movement during eruption. For one patient was recommended to temporarily delaying extraction due to the deep location of the germ in the upper jaw and proximity to the maxillary sinus, due to the predicted traumatic surgical procedure. One patient had a complication: dislocation of the germ under the mucous membrane of the maxillary sinus and the tooth was left.

For the surgical removal of fully impacted maxillary third molars were used buccal full-thickness mucoperiosteal flaps: full envelope (horizontal), limited horizontal and full triangular flaps.

Conclusions. For extraction of fully impacted maxillary third molars with formed roots without bone coverage, we used the full envelope flap and it was more convenient due to the relatively close location of the tooth to the dental ridge. In case of bone coverage of impacted maxillary third molars with formed roots, the use of a full envelope flap is often insufficient. At the same time, access and visualization of the surgical side is difficult, which can lead to complications such as injury to soft and bone tissues. In this situation, the optimal choice may be a full triangular flap with a vertical incision in the area of the distal part of the second molar, carefully in the position of the incision line on the bone after alveolar resection, not on the empty of the extracted tooth socket.

For extraction of tooth germs of the maxillary third molars, which are often observed completely immersed in the alveolar bone, using a full triangular flap with a vertical incision in the area of the distal part of the second molar can be considered optimal, due to the relatively deep localization, where access and visualization are complicated by the close location of the mandibular ramus. In case of deep location of the germs, it is possible to consider a limited horizontal flap. The remaining soft tissue on the alveolar ridge with a limited horizontal flap does not involved into the area of bone resection during exposure of the germs and which may be useless for using a full envelope or full triangular flaps. If the germs are located too deep, it would be advisable to consider also waiting or an alternative treatment method, due to the high risk of complications such as fracture of the maxillary tuber, bleeding, perforation of the maxillary sinus.

[OS 21]

Evaluation of healing time after simple tooth extraction.

Ibrahim O.Y.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Oral presentation

Background: A post-extraction alveolus heals normally in five overlapping stages, which involves clotting, replacement of blood clot with healthy granulation tissue, gradual replacement of granulation tissue by connective tissue and young pre-osseous tissue, following filling of bone trabecula of the alveolus. Closure of epithelium begins as regeneration on the fourth day.
Aim: The present study was conducted to evaluate the post-extraction healing time in the healthy patients, patients with chronic illness, smoker and non-smoker patients following non-surgical extraction.
Materials and Methodology: A total number of 40 patients were included in this study, in the I.U.A DENTAL CLINIC before extraction it had been taken relevant pre-operative medical and dental history as age, gender, after assessment of each patient extraction was performed under local anesthesia by forceps and dental elevators. each patient was given post-operative instructions properly and they was followed for more than a month in order to know the exact time of wound-healing, then the day of alveolus healing was recorded.
The researcher was used descriptive and comparative analytical study of the data collected from patients to determine the full recovery time after extraction.
3- Results: forty (40) patients with 40 extraction sites were evaluated for wound healing (alveolus) time after extraction; 17 patients (42.5%) were healed within 6-10 days after extraction, 16 patients (40%) were healed within 11-14 days after extraction, 7 patients (17.5%) were healed after more than 14 days following extraction.
For 1 diabetic patients healed within a week, 3 of them was healed within 11 - 14 days, and 2 needed more than 14 days to heal.
In 5 hypertensive patients it took 11 - 14 days for alveolar healing. And 3 patients with peptic ulcer 1 of them healed after more than 14 days, 2 of them healed within 11 - 14 days.
3 of patients developed dry socket so healing was delayed for more than 14 days.
concerning our study 92.5 % of extraction sites were healed uneventfully while 7.5% was acutely inflamed.
Conclusion: the most of post-extraction alveoli were healed uneventfully apart from 3 patients whom developed dry socket 3 days following the day of extraction.
Diabete, hypertension and peptic ulcer delay healing after tooth extraction.
There is no evidence found that smoking delays alveolus healing after tooth extraction.
post extraction is the most post extraction factor that made a patient seeking dental care but pain not always disturbed healing therefore clinical examination should be carried out properly.

Recommendation: it's highly recommended any patient should be well assessed before extraction as well as given properly post–operative instructions and followed up closely, those are cornerstones factors after extraction.

[OS 22]

Treatment planning of implants in the aesthetic zone.

Imanov E.

"Pro Implant" Aesthetic Dental Clinic, Baku, Azerbaijan

Presentation type – Symposium

This lecture describes a comprehensive step-by-step protocol for implant placement and restoration in the esthetic zone.
Implant placement in the esthetic zone is a complex procedure and requires a restoration-driven approach. Proper selection of patients and implant together with individual assessment of the risk of esthetic complications are very important part. Correct 3D-implant positioning sufficient bone volume should provide long-term esthetic and functional results.
Esthetic region is a zone in which expectations and possibilities collide.
Clinician should bring the important decision on the appropriate time of implant placement. Immediate implant placement is particularly challenging in the esthetic zone. Patient desire for reduced treatment time should be weighed against the possible risk factors. Protocol of immediate implant placement in conditions of unfavourable gingival biotypes, the lack of bone or soft tissue in patients with a high smile line lead to esthetic failure which is very important in the esthetic region.

[OS 23]

Important moments in immediate implantation.

Jafarov R.

Dental Department of the Faculty of Medicine of Nakhchivan State University, Nakhchivan, Azerbaijan.

Presentation type - Oral presentation

One of the most controversial topics in dental implantology is immediate implantation. So that, sometimes this method leads us to success and high aesthetic results, and other times it confronts us with complications.
And sometimes in our daily practice immediate implantation and immediate loading may appear as a patient's request.
Joint and correct planning and prediction of the workflow by the surgeon and pros-

thetist (orthopedist) results in increased success and minimum complications.
So, what should be kept in mind in cases of immediate implantation and immediate implant loading?
In the main, examination and planning should be made with the help of cone-beam CT. Here, attention should be paid to the apices of tooth roots and the thickness and height of the buccal wall of the alveolus. If local conditions are suitable for immediate implantation, a decision may be made to proceed with it. After that, the first thing we will do is to extract the teeth. This process should be performed atraumatically, in order to preserve the surrounding hard and soft tissues.
One of the frequently discussed points in immediate implantation is flapless surgery. This becomes more relevant for protection of the alveolus when the buccal wall is thin.
In cases where the examination does not reveal defects or damage to the hard tissues around the teeth, preference may be given to flapless implantation.
After tooth extraction, it is crucial to determine the position of the implant, which is best done by using surgical guides.
For immediate loading of installed implants, the most important requirement is a tightening torque of more than 35 Ncm.
In addition, this presentation will explain the rules of loading with temporary crowns, the choice of construction and abutments, and other issues.

[OS 24]

Strange Teeth, Strange Gum, and Their Implications.

Kantaputra N.

Center of Excellence in Medical Genetics Research Division of Pediatric Dentistry, Department of Orthodontics and Pediatric Dentistry, Faculty of Dentistry Chiang Mai University, Chiang Mai, Thailand.

Presentation Type – Plenary Session

This lecture will cover variety of rare dental and gingival anomalies and how they could tell us about the systemic conditions of the patients. Tooth agenesis is common but may be associated with a number of genetic syndromes. Mutations in AXIN2 may be associated with tooth agenesis and colorectal cancer. Dentinogenesis imperfecta may be seen as an isolated condition or is associated with osteogenesis imperfecta. Amelogenesis imperfecta may be present in patients who have renal tubular acidosis. The presence of supernumerary teeth may suggest that patients may have Cleidocranial Dysplasia or Tricho-Rhino-Phalangeal syndrome, or Familial adenomatous polyposis syndrome. This lecture will also describe how to find the genes responsible for dental and gingival anomalies. Our group has identified the genes that caused the biggest teeth and the smallest teeth in the world. The presence of gingival fibromatosis may suggest us to look for other associated conditions including cherubism-like lesions, hearing loss, hirsutism, or even epilepsy. Recently our group has identified and published 7 genes responsible for the formation of mesiodens and oral exostoses. Our research group genuinely and enthusiastically welcomes worldwide

research collaboration with the hope to identify the genetic causes of rare craniofacial disorders. The strong intention of our research group fits well with the motto of this congress which is "Expansion of the boundaries of cooperation".

[OS 25]

Management of Atrophied Maxilla: Zygomatic Implants vs Other Techniques.

Lemma F.

Department of Maxillofacial Surgery of the Ospedale dell'Angelo Venice-Mestre, Venezia, Italy.

Presentation type – Symposium

The placement of zygomatic implants is not without complications, nor is the use of other maxillary rehabilitation techniques. Which technique guarantees fewer complications? Which is best for prosthetic rehabilitation? Extensive literature review regarding implant success post pre-prosthetic treatment.

[OS 26]

Implantüstü konstruksiyaların tədbiqi zamanı implantətrafı toxumalarda yaranan streslər.

Mahmudov V.S.

Azərbaycan Tibb Universitetinin Ortopedik stomatoloqiya kafedrası, Bakı, Azərbaycan.

Aktuallığ. Dental implantların istifadəsilə əlaqədar olaraq bir çox amillərin mexaniki və riyazi modellləşdirilməsi məqsədilə son illərdə sonlu elementlər üsulunun tətbiqi geniş yayılmışdır. İmplantın osteointeqrasiya olunduqdan sonra hədsiz yüklənilməsinin qarşını almaq üçün, göstərilən qüvvənin yaratdığı stresin implant və implant ətrafı toxumalara necə yayıldığını, həmçinin bu streslərin implant ətrafı toxumalarda yaratdığı yan təsirlərin bilinməsi olduqca vacibdir.
Tədqiqatın məqsədi. Fərqli modellər üzərində implantüstü çıxan protezin implanta təsirinin 3D sonlu elementlər stress analiz üsulu ilə öyrənilməsi.
Material və metodlar. Tədqiqat işi Azərbaycan Tibb Universitetinin Ortopedik Stomatologiya kafedrası və "AY-Tasarım" MMC-nin laboratoriyasında həyata keçirilmişdir. Aparılan analiz üsulundan sonra implantlar üzərində Von Mises stress dəyərləri əldə edilmişdir. Fərqli nahiyələrdən çeynəmə qüvvəsi tətbiq etməklə, 10 fərqli 4 implant üzərinə hazırlanmış 3D riyazi model bar ataçman sistemində yaranan gərginliklər təhlil edilmişdir.
Tədqiqatın nəticələri və onların müzakirəsi. 10 fərqli riyazi model sistemində implantların sümükdə yerləşmə bucaqları 90°, 17° və 30°, yerləşmə səviyyəsi 1 implantın digər

3 implantla müqayisədə 1 mm və 3 mm (çənənin sümük konfiqurasiyasına uyğun) hündürdə götürülmüşdür. İmplantlar üzərində hazırlanan bar sistemin sonsol çıxıntısının uzunluğu isə fərqli modellərdə 0 mm, 5 mm və 10 mm götürülmüşdür. Modellər üzərinə verilmiş yük 1 sm ölçüdə sərt qida kütləsinin 100 N qüvvə ilə (təxminən 10,2 kq) çeynəmə hərəkətinin virtual əvəzi olmuşdur. Müvafiq qüvvə 3 fərqli sahədən verilmişdir. Anterior nahiyyədən-qida parçasının mərkəzi mərkəzi kəsici dişlərin kontakt nöqtəsinin üzərinə, sağ-posterior nahiyyədən-qida parçasının mərkəzi 2-ci premolyar dişlə 1-ci molyar dişin kontaktının üzərinə və sol-posterior nahiyyədən-qida parçasının mərkəzi 2-ci premolyarla 1-ci molyar dişin kontaktının üzərinə düşmüşdür. 3D sonlu elementlər stress analiz üsulundan sonra implantlar üzərində Von Misses stress göstəriciləri və müvafiq göstəricilərə uyğun şkalalarla əldə edilmişdir. İmplantətrafı sümükdə isə Maximum və Minimum Principle stress göstəriciləri və rəng şkalaları əldə edilmişdir. Müvafiq göstəricilər üzrə standart deviasiya göstəricisi 0,839 müəyyən edilmişdir. Alınan göstəriciləri təhlili və müqayisəsi həyata keçirildikdən sonra ən optimal stress paylanmasının bir implantın yerləşmə səviyyəsi 3 mm olan modellərdə müşahidə edilmişdir. Həmçinin konsol çıxıntısının 0 mm olan modeldə də optimal stress paylanması qeydə alınmışdır. Yerləşmə səviyyəsi 1 mm olan modellərdə qeydə alınan stress miqdarı isə həmin sümük topoqrafiyasına uyğun çənələrdə hamarlama prosesinin lazım ola biləcəyini göstərmişdir. Bucaq altında yerləşdirilmiş modellərdə əldə etdiyimiz stress göstəricilərinin qeyri-bərabər paylanması və implantlar üzərinə düşən stress göstəricilərinin olduqca yüksək miqdarda olması mümkün olduqca bucaq altında yerləşdirilmədən yayınmaq lazımdır.

[OS 27]

Biomimetic Dental Implants; Design, Production, In vivo and In-vitro Results.

Önder M.E.

Department of Oral, Dental and Maxillofacial Surgery at Lokman Hekim University Faculty of Dentistry, Ankara, Türkiye.

Presentation type – Symposium

The popularity of dental implants produced with additive manufacturing techniques for R&D purposes has been increasing recently. The production of medical products with complex macro and micro geometries in this way supports this process. In addition, with additive manufacturing, the surface area of the implant, whose porosity and geometry are designed, is increased and the elastic modulus value is brought close to the bone. Instead of a porous structure with irregular pore size and distribution, it is aimed to create more predictable and successful products in biological and mechanical terms by using lattice architectures with regular geometric structure and controlled pore size. With the additive manufacturing technique, it is possible to obtain biomimetic structures that allow rapid and appropriate regeneration.

[OS 28]

Oral rehabilitation of the cancer patient.

Petrovic I.

New York City Metropolitan Area, New York, USA.

Presentation type - Symposium

Rehabilitation of oral functions following surgery on the jaws is a goal that is often difficult to achieve. Removable dentures supported by remaining teeth or gum are often unstable and seldom satisfactory. On the other hand, endosseous (dental) implants offer a mechanism to provide stability to the dentures. This review, discusses factors related to the tumor, patient, treatment, and physicians which impact upon the feasibility and success of dental implants in patients with oral cancer.

[OS 29]

Alveolar Bone Augmentation and Reconstruction Prior to Dental Implant Placement.

Rachmiel A.

Department of Oral & Maxillofacial Surgery, Rambam Medical Center.
Technion Faculty of Medicine, Haifa, Israel

Presentation type – Symposium

Introduction: Severe alveolar deficiency may result secondary to excessive periodontal disease, as a result of ablation surgery following tumor or cyst resection or secondary to traumatic injuries. We will describe the management in different regions of the jaws which pose different challenges for implant placement and augmentation. Alveolar bone deficiencies can be treated using several reconstructive and regenerative methods.
Materials & Methods: In this presentation we will exhibit our experience in treatment of mild to severe alveolar bone deficiencies using the methods of Onlay bone grafting, Interpositional bone grafting, Alveolar distraction osteogenesis (ADO) and the use of Patient Specific Implants (PSI). Following bony reconstruction, dental implants were introduced for fixed dental rehabilitation.
Indications, contra indications, advantages and disadvantages of each method will be presented.
Results: Mild cases benefit from Interpositional bone grafts. Severe cases are better reconstructed using alveolar distraction osteogenesis. In extreme cases Onlay bone graft was used as a first stage, followed by distraction osteogenesis. Lately the use of Patient Specific Implants (PSI) was introduced for aiding in reconstruction of severe deficiencies. Following reconstruction, dental implants were introduced, and fixed dental rehabilitation was performed.

Conclusions: When addressing the different augmentation methods - it is important to be aware of their advantages and disadvantages. Interpositional bone graft gave better results in mild cases.

[OS 30]

Dynamic navigation for Zygoma implant fixture placement.

Rajan G.

Rajan Dental Institute, Chennai, India.

Presentation type – Symposium

Zygoma implants have become an accepted norm for dentoalveolar rehabilitation. However, surgical positioning of the implant is critical because of the proximity to the orbit and the anatomical configuration of the body of the zygoma. Navigation helps in precise positioning of the zygoma implant and is especially valuable in quad zygoma procedures.
This presentation will highlight the value addition of navigation in Zygoma implant placement.

[OS 31]

Management of Mandibular Large Odontogenic Keratocysts by Decompression.

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Yeditepe University Faculty of Dentistry, İstanbul, Turkey

Presentation type – Oral presentation

Background - The Odontogenic Keratocyst (OKC) is a controversial odontogenic developmental cyst that has undergone conceptual and terminological changes in recent decades. Historically, the following modalities have been employed in the management of OKC: decompression, marsupialization and enucleation, marginal or radical resection. Among these approaches, decompression aims to decrease the volume of the lesion in order to prevent surgery-related fractures and to preserve the surrounding anatomical structures such as the inferior alveolar nerve.
Aims/Objectives - In this case reports, four cases will be presented and the outcome of the decompression theraphy for the treatment of OKC will be discussed.
Methods - Four patients with different complaints referred to our Oral and Maxillofacial Surgery clinic in Yeditepe University Faculty of Dentistry. After the examination, incisional biopsies were taken and OKC was diagnosed after the histopathological examination. Decompression was chosen according to patients age, anatomical location and size of the lesion, pathological fracture risk.

Results/Findings - All cases were present in the mandible and comprise angle and ramus region. Cases were monitored continuously after decompression to evaluate the shrinkage of the lesion with clinical evaluation and X-rays and if deemed necessary, enucleation was performed.
Conclusions - In our opinion, decompression would offer comparable results to those obtained with extensive surgery with an important advantage like low morbidity particularly in young patients. Despite the view of offering low recurrence rate with decompression, we strongly think long term follow-up is crucial because the lesion is known to be proned to high frequency of recurrence.

[OS 32]

Neurological problems in implantology and the ways to solve them.

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"Implant-Servis" clinic, Baku, Azerbaijan.

Presentation type – Oral presentation

12 cranial nerves-which of them innervates maxillofacial system.
Sensory, motor, and mixed cranial nerves.
5 cranial nerves innervating maxillofacial system.
The cases which dentists can damage nerves and the ways to solve them.
Traumatic neuropathy and its treatment
Localization of mental foramen, to pass through during implantation.
Reposition of mandibular nerve and complications of it.
Nerve damage during extraction of wisdom teeth and treatment of molar teeth.
Traumatic neuropathy after dental implantation, when we must extract implants.

Treatment plans on nerve damages

[OS 33]

Restoration of perforation of the maxillary sinus using autotransplant.

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NjSC "Astana Medical University", Kazakhstan Department of Surgical Diseases with courses in cardiothoracic surgery and maxillofacial surgery named after. professor Tsoi G.V. Astana, Kazakhstan.

Presentation type – Oral presentation

Background - Restoration of the maxillary sinus after perforation with planning of implant treatment is an important aspect of maxillofacial surgery. Oro-antral communication, often resulting from complications during tooth extraction, poses a serious

problem for both patients and doctors. Disruption of communication between the oral cavity and the maxillary sinus can lead to complications such as chronic odontogenic sinusitis, odontogenic sinusitis, ENT infections and a deterioration in the quality of life of patients. Therefore, it is extremely important to find effective methods to solve this problem.
Aims/Objectives - The purpose of our study is to study the effectiveness of the approach - the use of free bone autotransplant from the lateral wall of the maxillary sinus, taking into account the planning of effective implant treatment. This technique has potential advantages, including reduced donor site-related morbidity and an adequate supply of graft material. By studying the results of this technique, we aim to contribute to the existing body of knowledge on maxillary sinus reconstruction. Research objectives: Evaluating the effectiveness of the proposed methodology. Study of immediate postoperative results Analysis of maxillary deformation in patients. Assessment of relapses using the proposed methodology.
Methods - The study included two groups of patients: the main group, in which the proposed technique was used, and the control group, in which traditional closure of the mucosa with a periosteal flap was performed. Both groups received standard postoperative treatment, including antibiotic therapy. Immediate postoperative results, deformation of the maxillary alveolar process 1 and 2 months after surgery, as well as prevention of relapse of the oro-antral communication were assessed. The diagnosis was established on the basis of patient complaints, medical history, objective data from the oral cavity and superior sinuses, additional research methods (CT, X-ray images), and measurement of the size of the bone defect. The surgical treatment method included the following stages: Under local and infraorbital anesthesia, a circular excision of the edges of the oro-antral communication was performed. Formation of a trapezoidal, mucoperiosteal, alveolar-buccal flap using the splitting method. Formation and extraction of a bone graft of the required size from the lateral wall of the maxillary sinus. Placement of the bone graft in an isotonic solution of sodium chloride with PRP made from the patient's own blood according to a standard protocol. Aspiration of sinus contents, assessment of inflammation, removal of foreign bodies and granulations. Preparing a bed for a bone graft at the site of the oro-antral communication, refreshing the cortical plate according to the size of the bone graft. Installation of a bone graft in place of the prepared bone bed. Protection of the graft with a blood clot on the sinus side and fixation of the graft with a hemostatic sponge. Creation of a subepithelial vascularized palatal flap with internal suture fixation. Antibacterial therapy: In the postoperative period, patients of both groups received standard antibacterial, anti-inflammatory and symptomatic treatment.
Results/Findings - Immediate postoperative results: Main group: In the immediate postoperative period, only 1 (9%) patient developed a wound dehiscence in the area of the mucoperiosteal flap, which was successfully repaired without recurrence of the oro-antral communication. Control group: In the control group, 3 (21.4%) patients had wound dehiscence, which led to recurrence of the oro-antral communication and required additional sutures. Deformation of the maxillary alveolar process (1 and 2 months after surgery): Main group: In the main group, 10 (91%) patients had no deformation of the maxillary alveolar process, which was confirmed by radiographs 1 and 2 months after surgery. Control group: In the control group, all 14 (100%) patients had retraction of the oral mucosa and deformation of the alveolar process. This method prevents retraction of the oral mucosa into the defect and promotes optimal rehabilitation of the patient. The technique is simple and can be recommended for practi-

cal use in clinical settings, which has the potential to improve patient outcomes and reduce complications.

Conclusions - This paper presents a surgical approach to closure of the oroantral communication that successfully overcomes the difficulties associated with this specific problem. The method allows you to preserve the structural integrity of the maxillary alveolar process. This is achieved by preventing fusion of the oral mucosa with the Schneiderian membrane at the oro-antral junction, which allows for further implantation and planning of orthopedic treatment. To improve vascularization, proposed approaches include: Submucosal incision for alveolar buccal flap creation, cortical exposure for graft bed preparation, and use of platelet-rich plasma (PRP). Integration of these sequential procedures can effectively reduce graft engraftment time and consequently improve clinical outcomes for patients. The proposed method not only provides favorable results in the immediate postoperative period, but also prevents deformation and relapses. Thus, repair of the bone graft of the lower wall of the maxillary sinus is carried out both due to the activation of osteoblasts and due to endesmal osteogenesis (from pre-existing fibrous structures) and is accompanied by the formation of new microvessels in the developing bone beams. The presence of appositional lines in individual bone trabeculae can apparently be attributed to reactive dysregenerative changes that develop during the transplantation process. The absence of multinucleated osteoclasts in the tissues we studied can be explained by the absence of osteolysis foci.

Plastic & Reconstructive surgery [PRS]

[PRS 01]

Technique for positioning of the fragments of fibula free flap in reconstruction of complex defects of the mandible. Demonstration on a single clinical example.

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Elimination of defects of the lower jaw is an actual topic in maxillofacial and reconstructive surgery. The gold standard today is considered to be microsurgical reconstruction of mandibular defects using revascularized tissue complexes including the fibula. Significant achievements in this field are associated both with the peculiarities of blood circulation in flaps with the inclusion of the fibula, which make it possible to simultaneously model the grafts in accordance with the size and geometry of the defects, and with the technical advantages of carrying out this stage using previously prepared three-dimensional templates obtained using CAD/CAM technology.
Thus, the creation of three-dimensional templates in environmental conditions according to a strictly specified design of the mandibular defect allows saving time and increasing the accuracy of control of autografts. At the same time, the use of this technology limits situations in which the geometry defect cannot be identified in the preoperative period and is determined only during compliance. This circumstance creates even greater inconvenience in cases with defects of the angle, body and branch, where not only an aesthetic contour is necessary, but also a transition between two functional zones: the tooth-bearing area and condyle bearing region, which forms the branch of the neomandible.

In such cases, the CAD/CAM technique cannot show its maximum potential, and significant deviations in the geometry of the defect from the preoperative plan can only increase the problems in remodeling the already templated bone flap fragments.
To prevent damage while modeling the neomandible during reconstruction, we propose in such cases to abandon the use of CAD/CAM technology in terms of forming the angle between the body of the tooth-containing segment and the ascending branch of the neomandible and use the technique of comparing these fragments by creating a planar connection and positioning the articular process during fixation, by analogy with the method of bimanual positioning during orthognathic surgery.
We demonstrate this technique using a clinical example:
Patient K., 59 years old, has been suffering from a defect of the lower jaw for 15 years, formed after resection for a benign neoplasm of the lower jaw in the area of the angle and body. CT analysis revealed that the tooth-bearing fragment of the lower jaw was fixed with a power titanium plate to the zygomatic arch, as a result of which the

patient developed contracture of the lower jaw. The patient underwent reconstructive surgery, during which the structure was removed and the articular process was isolated, the amplitude of its mobility was assessed, and the lengths of the fragments of the body and the ascending branch of the neomandible were measured. On the lower extremity, during the formation of a flap with the inclusion of the fibula, an osteotomy was performed dividing the bone component of the flap into two fragments with lengths corresponding to the measured ones. The opposing edges of these fragments are prepared for planar connection, after which the flap is cut off and transferred to the defect area, where fixation between the flap fragments was carried out last, after fixing the corresponding fragments to the edges of the jaw defect (body and articular process).

For fixation between the fragments in relation to the ascending branch of the neomandible, a standard technique for positioning the condylar process of the mandible was used and fixation between the fragments was carried out using a bicortical screw and plate. The diastasis between the fragments was filled with autogenous and xenogeneic bone material, and the flap was revascularized using the facial vessels.
In the long-term period, dental implantation was performed in the area of the transferred flap. The opening of the mouth was completely restored; a CT scan 6 months after the operation showed the formation of bone tissue in the area of diastasis between the flap fragments.
This clinical example seemed interesting to us, primarily due to the fact that during the period of active development and dissemination of digital technologies in reconstructive surgery, we still encounter cases in which direct methods of transplant modeling may be more preferable in comparison with preoperative modeling methods and creating templates for osteotomy and fixation of flap fragments.
Also, we found it interesting to use the planar osteotomy technique, which is not common for these reconstructions, and to use the advantages of the planar connection - the possibility of positioning the articular process and fixing the fragments in a functional position. This technique may be useful for solving practical issues of autograft modeling in similar clinical situations.

[PRS 02]

Head and neck soft tissue defects reconstruction after ablastic suregeries.

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Presentation type – Symposium

Background. Various techniques are available for the reconstruction of soft tissue defects of the head and neck, each with its own advantages and indications. Each patient's defect is unique and several reconstruction options can be used to meet functional, volumetric and aesthetic requirements. Therefore, to decide which of them

are suitable for a particular patient, it is necessary to take into account a number of factors.
Objectives. Selection of optimal options for soft tissue reconstruction after ablastic operations in the head and neck area, depending on the location, size, tissue composition of defects and somatic status of patients.
Materials and methods. A retro- and prospective study was conducted including 260 patients with head and neck tumors who underwent restoration of soft tissue defects using various reconstruction options from 2015 to 2023.
Results. Among 260 patients, defects of the head and neck skin were present in 99, oral cavity in 78, lower lip in 63, and pharynx in 20 patients. Reconstruction was performed using primary wound closure in 42, local flaps in 75, regional flaps in 104, and distance flaps in 39 cases. Local complications after reconstructive operations were observed in 98 (37.5) patients. Among them, total flap necrosis occurred in 6 (6.1%) patients. Other complications were observed in the form of partial necrosis in 18 (18.4%), marginal necrosis in 29 (29.6%) and wound dehiscence in 45 (45.9%) patients. Good and satisfactory functional results were obtained in 249 (95.8%), aesthetic results in 226 (86.9%) cases.
Conclusions. Over the past decades, evidence-based and experience-based algorithms for flap selection for reconstruction of soft tissue defects after ablastic head and neck surgery have been developed, improving outcomes and reducing complications. The future will undoubtedly bring further breakthroughs in an attempt to restore normalcy and improve cancer cure rates and quality of life.

[PRS 03]

Comparative evaluation of various materials used for facial contouring.

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Presentation type – E-Poster

Background - In the modern world, an integral part of maxillofacial surgery is aesthetic surgery. With the growth of the population's capabilities, contouring plastic surgeries are becoming more and more popular. There are several treatment approaches in this type of intervention - both transplants and artificial materials - implants can be used. We will consider the latter in detail.
Aims/Objectives - The objective of our study is to analyze the long-term results of using modern implant materials in the contouring plastic surgery of the maxillofacial area.
Methods - n total, we collected data of 143+3 patients from the database of our clinic who underwent facial contouring plastic surgery using various implants that were analyzed in the time period over 7 years. Among these people, 5 patients were with silicone implants, 109 patients with Medpor implants, 29 patients with Ekoflon implants. And also in 3 patients, PEEK facial implants were installed in the area of the upper outer edges of the orbits, the angles of the jaw and the articular cavity of the TMJ during its prosthetics. Among these patients, the material was taken at a different time from

the installation of the implant: a fragment of the implant, a capsule, and a bone under the implant. We proceeded with the histological examination and cone-beam CT-scan. Using this protocol of examination, 28 cases were analyzed. Among these, silicone implants consisted of 8 cases, Medpor 12 cases, Ekoflon 8 cases.
Results/Findings - According to the results of the analysis of histological preparations, the main advantages and disadvantages of each type of implants were identified. With no doubt, an autologous bone is the most preferable material in terms of biocompatibility. However, for aesthetic surgery and facial contouring plastic surgery, it is extremely important to maintain the achieved postoperative result for many years.
Conclusions - Therefore, after solving all problems, and fulfilling the main aim of the work - analysis of the modern implant materials and long-term results of their use, we can conclude that today synthetic materials based on high-density polyethylene (Medpor) and polytetrafluoroethylene (Ecoflon) are performing their task for the longest time and without relapse. Also, we can argue that silicone-based implants, although proven in other areas, should not be used in the face area. Silicone not only gives the imaginary effect of a successful operation but also violates the condition of the patient's healthy bone. As a result, when using it, we will not achieve stable long-term results and we will endanger the full well-being of the patient.

[PRS 04]

Rinoplastikada Piezo və Tur cihazlarının istifadəsi, son yeniliklər.

Aslanov P.

West Hospital, Bakı, Azerbaijan.

Presentation type - Symposium

Burun belində hündürlüyün götürülməsi, paramedian, medial, transvers, lateral osteotomiya rinoplastikanın önəmli addımlarından biri olmasına baxmayaraq əməliyyatdan sonra gözün ətrafında ödemin, şişkinliyin və ekimozun olmasına səbəb olur. Osteotomlara alternativ olaraq rinoplastikada elektrikli cihazlardan geniş istifadə olunur ki, bunlardanda ən populyarı piezo və tur cihazlarıdır. Hazırda NSK, Action, Woodpecker, Mectron, Nouvag markalı piezo və tur cihazlarından geniş istifadə olunur. Rinoplastikada şişkinliyi minimuma endirmək üçün ənənəvi üsullardan və ya cihazlardan istifadə ilə bağlı dəqiq fikir birliyi yoxdur.
İşin məqsədi: Osteotomiya üçün istifadə olunan cihazları və ənənəvi ostetomiyaları ödem və şişkinliklə bağlı müqayisə etmək.
Tədqiqatın metodu: Açıq üsulla rinoplastika əməliyyatı icra olunan 90 xəstə seçildi. 60 xəstəyə piezo və tur cihazı, digər 30 xəstəyə ənənəvi osteotomlarla osteotomiya icra olundu. Ödem və şişkinlik başqa bir cərrah tərəfindən qiymətləndirildi, qeyd edildi və bir-biri ilə müqayisə edildi.
Nəticə: Xəstələrin 62-si (68%) qadın, 28-i (32%) kişi cinsi idi. 60 xəstəyə (43 qadın, 17 kişi) piezo və tur ilə, digər 30 xəstəyə isə (19 qadın, 11 kişi) ənənəvi osteotomlarla rinoplastika icra olundu. Hər 2 qrupda yaş ortalaması 26,2 (18-46) idi. Ödem və şişkinlik postoperativ ikinci gündə I qrupda (piezo və tur cihazı istifadə olunan) demək olar ki yox dərəcəsində idi. II qrupda (ənənəvi osteotomiya icra olunan) ödem, şişkinlik,

ekimoz kifayət qədər hiss olunur, bəzi pasiyentlərdə gözlərinin açılmasına maneçilik törədirdi. Əməliyyat sonrası 7-ci günündə qrupar arasında ciddi bir fərq görsənmirdi. Yekun: Bu tədqiqat rinoplastikada Piezo və Tur cihazlarının istifadəsinin yumşaq toxuma və sümük üzərində ödem və şişkinlik baxımından ciddi bir təsirə malik olduğunu göstərmişdir. Piezo və Tur, ənənəvi osteotomiyaya alternativ ola bilər.

[PRS 05]

Revizyon rinoplastikaya müasir baxış, önəmli texniklər.

Aslanov P.

West Hospital, Bakı, Azerbaijan.

Presentation type – Symposium

Rinoplastika üz estetik cərrahiyyəsinin ən çətin əməliyyatlarındandır. Burun üzün tam orta bölgəsində yerləşdiyi üçün əgər düzgün şəkilləndirilməzsə estetik problemlərlə yanaşı funksional problemlərdə yaranır. Burun ucunun yenidən şəkilləndirilməsi skorlama, rezeksiya və transeksiya ilə başlamışdır. Rinoplastikaların sayı artdıqca ikincili deformasiyalar ortaya çıxmışdır. Rinoplastika əməliyyatlarından sonra ən təcrübəli cərrahlarda belə 3-15% hallarda revizyon əməliyyat ehtiyacı yarana bilər. Rinoplastika ilə məşğul olan cərrahlara təkrar əməliyyat üçün müraciət edən xəstələrin arasında ən çox rast gəlinən problemlər və diaqnozlar aşağıdakılardır: pinching və hanging kolumella, "saddle nose" deformasiyası, çapıq toxuması, assimmetrik dorsum rezaksiyası, "open roof" deformasiyası, artırılmış və azaldılmış tip projeksiyonu, bulloz və ya geniş burun ucu, tip assimmetriyası, "Bossae", "Pollybeak", eksternal və internal valv kollapsı, burun dəliklərində assimmetriyalar və s.
İşin məqsədi. Birincili və təkrari rinoplastika əməliyyatlarında cərrahi texnikanın düzgün tətbiq olunması və onun qiymətləndirilməsidir. Material və metod. 185 pasiyent, onlardan 140-si ilkin, 45-ü təkrari olmaqla operasiya olunmuşlar. Təkrari rinoplastikada biz ən çox açıq rinoplastika üsulu ilə cərrahi əməliyyatlar icra etmişik. Təkrari rinoplastikada biz lazım olan hallarda qulaq seyvanı qığırdağından, Eren Tastanın "Oblique split" metodu ilə hazırlanmış 6,7-ci qabırğa kəsiklərindən alınan qreftlərdən istifadə etmişik. Normadan artıq incə dəri ilə qarşılaşdıqda dərialtı toxuma fassiya, perixondium və ya əzilmiş qığırdaq qreftləri ilə qalınlaşdırılmışdır. Cərrahi yolla tam korreksiya mümkün olmayan əyri burunlarda burunun lateral divarı, qreftlər ilə bərpa edilmiş və sərt raspator ilə kiçik kəsikdən daxil olaraq yumşaq toxumalara zərər vermədən sümüyün düzləndirilməsi mümkün olmuşdur. Qısa, burun ucu çox qalxmış burunlarda "septal extension" qreftlərdən istifadə edilmişdir.
Nəticə. İlkin və təkrari rinoplastikada cərrahi əməliyyatların nəticələri qiymətləndirilmiş, əməliyyatdaxili cərrahi texnikalar və əməliyyatdan sonraki nəticələr arasındakı fərqlər müəyyən edilmişdir. Təkrari rinoplastikaya ehtiyacın yaranma tezliyi ilkin rinoplastika ilə müqayisədə daha çox qarşımıza çıxmışdır. (Müşahidələrdə ilkin rinoplastika 8.6%, təkrari - 18.5% ; p=0.005).

[PRS 06]

Surgical facial harmonization.

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The desire of patients to look better and better pushes surgeons to search for different methods or their combinations to realize these goals.
Progress in the development of facelift methods has provided surgeons with a large arsenal of techniques. Today, we perform staged operations to harmonize and beautify the face in patients with craniomaxillofacial deformities, since only orthognathic surgery does not always lead to complete aesthetic satisfaction for the patient and sometimes to complete dissatisfaction.
The modern concept of harmonizing operations includes orthodontic and orthognathic treatment and genioplasty at the first stage.
In the second stage, after 6 or more months, endoscopic plastic surgery of the middle zone, endoscopic plastic surgery of the upper zone, upper and lower blepharoplasty (intraoral endoscopic lower blepharoplasty), lipofilling or the use of facial implants to restore volume and eliminate infraorbital retraction were simultaneously performed. Smasplasty and endoscopic neckplasty in patients over 40 years old.
Orbitotomy to correct proptosis. In the case of osteotomy (BSSO) of the lower jaw only (without the upper), rejuvenating and image operations were performed in one stage with orthognathic ones.
To achieve a full result, the third stage, after another 6 months, was performed aesthetic rhinoseptoplasty and otoplasty.
In the clinic, from September 2020 to May 2023, we performed remodeling of the facial skeleton, including orthognathic surgeries and genioplasty, endoscopic facial beautification and rhinoplasty in 30 patients. The age of the patients ranged from 19 to 48 years. Among them are 27 women and 3 men.
Complications included suppuration of midfacial tissue in one patient after midface plastic surgery due to discontinuation of antibiotics in the postoperative period. After sanitation, drainage and antibiotic therapy, the complication was stopped. In one patient, paresis of the upper lip was observed, associated with trauma to the levator muscle of the upper lip during intraoral fixation. After 3 weeks, the paresis self-limited without treatment.
The results obtained from such combined operations were as aesthetic as possible. The long-term observation period was 1 year.

[PRS 07]

Face reconstruction.

Biemer E.

Technical University of München, Germany.

Presentation type – plenary sessioin

In the last fifty years the possibilities we have for face reconstruction has been dramatically changed and enormously widened. I could participate and being actively involved.

Since Reverdin we could replace skin and this was improved by split thickness skin grafts. Pedicled flaps were known since Sarasvaty and in Europe since Tagliacozza.

This was reborn in the 19th century in Europe. After this the tube pedicled flaps could allow us to cover in multiple steps further distant defects.
This time of so-called random pattern flaps changed after the development of the vascular pedicled flaps in 1971. Together with Microsurgery it opened the wide field of tissue transfer directly to the place of the defect. We learned more about the peripheral vascular system which led to the muscle flaps and to the perforator flaps.

So, we could replace composite losses, By the prefabrication this was widened for complex losses for example of the nose.

By muscle and nerve transplantation we also could restore function in the face.

And finally, since the late 19th face transplantation is up to now a chance to replace totally destroyed faces.

[PRS 08]

Reduction of the inferior wall of the orbit with transposition of soft tissues as the most optimal surgical method for the treatment of endocrine ophthalmopathy.

Dikarev A., Vardanyan S., Mantardzhiev D., Sergeev I., Sychev V., Batyrev A., Ovsoyan G.

-OOO «Aesthetic company», Russia

Presentation type – Oral presentation

Endocrine ophthalmopathy (EOP) is a complication of all diseases characterized by thyrotoxicosis. EOP is diagnosed annually in 16 women and 2.9 men per 100,000 population, highlighting the need for an effective treatment algorithm. Currently, there are

three main directions in EOP therapy: conservative therapy, radiation therapy, and surgical treatment. Each method has its limitations. Conservative therapy may only be effective in cases of mild EOP. According to several sources, radiation therapy is effective in only 60% of cases. In other words, almost every second patient with moderate to severe EOP may not benefit from radiation therapy.
Surgical treatment of EOP is based on two main principles: decompression of the orbit by reducing the volume of the paraorbital cellular tissue and resection of hypertrophied extraocular muscles. Orbital decompression through the resection of orbital walls and increasing space for contents is another surgical approach. Resection of orbital fat can reduce exophthalmos by an average of 5-6 mm, but eye muscle function may suffer from their resection. Reduction of the medial and lateral walls of the orbit is associated with complications such as cerebrospinal fluid leakage and sensory disturbance in the paraorbital area.
Aims/Objectives - The aim of this study was to analyze the effectiveness and complication rate of orbital decompression using the technique of resection of the lower orbital wall with transposition of soft tissues in the peri-orbital area as a method for treating EOP.
Methods - The experience of performing operations using this technique was retrospectively analyzed. Surgical treatment was carried out after patients achieved a euthyroid state. The study included only patients with moderate EOP. The effectiveness of surgical treatment was assessed based on the elimination of EOP symptoms and the absence of complications related to the surgical procedure.
Results/Findings - Twenty-one such operations (42 orbits) were performed using video endoscopic technologies. Twenty-one surgeries were performed simultaneously with rejuvenation of the peri-orbital area. The technique involved enhancing tissue support by transposing soft tissues, specifically the malar bag, under the lower edge of the orbit. In 19 cases (90.5%), EOP symptoms were completely eliminated. In two cases (9.5%), the severity of EOP decreased to mild after surgical treatment. No complications were detected in any of the cases after surgical treatment.
Conclusions - The results of this study show that this technique has several advantages over the main accepted techniques and their combinations. Transposition of soft tissues in the periorbital area provides a harmonious result with no visual stigma on the operated face and stable outcomes. Further operations using this technique will be conducted to obtain more data.

[PRS 09]

Revizyon Rinoplastika əməlliyyatları zamanı qabırğa qığırdağı istifadəsi.

Guliyev M.D.

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Aktuallıq. Revizyon Rinoplastika əməliyyatları əvvəllər bir və ya bir neçə dəfə rinoplastika əməliyyatı keçirmiş xəstələrdə həyata keçirilən funksional və yaxud estetik olaraq yaranmış problemləri aradan qaldırmaq məqsədilə həyata keçirilən burun əməliyyatlarındandır. Əvvəlki əməliyyat zamanı burun içərisindəki qığırdaq, sümük

materialın istifadə olunması və ya çıxarılıb kənarlaşdırılması təkrari əməliyyat zamanı mövcud problemi aradan qaldırmaq üçün qığırdaq materialına ehtiyac yaradır.
Bu qığırdaq material ehtiyacı ya qulaq qığırdağı, kadavra qığırdağı, sintetik materiallar ya da ən idealı öz qabırğasından alınmış qığırdağın istifadəsi hesabına aradan qaldırıla bilir. Çünki otoloq qığırdaqlar (qulaq vəya qabırğadan alınan) süni implant materiallar ya da ki, kadavradan (meyitdən) alınan qığırdaqlar ilə müqayisədə nəticə etibarı ilə daha effektivdir. Əgər burunda yaranmış problemlər daha çox qığırdaq ehtiyacı yaradırsa, o zaman qabırğa qığırdağı alınaraq aradan qaldırılır. lakin qabırğa qığırdağı quruluş xüsusiyyəti ilə əlaqədar olaraq əyilib-bükülmə qabiliyyətinin olması üzündən arzu olunmaz nəticələrə səbəb ola bilir.
Məqsəd: Yuxarıda sadalanan problemləri aradan qaldırmaq məqsədilə əldə olunmuş qabırğa qığırdağını çəp şəkildə kəsərək əldə olunan qığırdaqlar bükülməyə davamlı olduğu üçün „oblique split metod" ilə qabırğa qığırdağı qreftlərindən istifadə edərək həyata keçirilən revizyon rinoplastika əməliyyatının nəticələrini araşdırmağı hədəflədik.
Material və Metod 20.08.2018 - 16.11.2022 tarixlərində əməliyyat olunmuş 76 xəstədə autoloq qabırğa qığırdağı götürülərək revizyon rinoplastika əməliyyatı həyata keçirildi. Xəstələr 58 qadın, 18 kişi (24 yaşla 58 yaş arasında) olaraq çalışmaya daxil edildi. Bütün xəstələrdə VII qabırğadan əldə olunan 3-4 sm uzunluğunda qabırğa qığırdağı çəp şəkildə ən uzun parçası 3 sm olmaqla təxminən 1-2 mm qalınlığında səhifələr şəklində doğranaraq rekonstruksiyada istifadə olundu. Rekonstruksiya zamanı „L" çərçivəni formalaşdırmaq üçün əldə olunan incə qreftlərdən spreder qreftlər şəklində dorsal parçanı və „Rhino" qreft olaraq kaudal parçanı spina nazalis anteriora xüsusi metodika ilə əriyən 5.0 PDO sapla tikildi.
Nəticələr 12-24-36 ay müddətində nəzarətdə saxlanaraq dəyərləndirildi.Post op.dövrdə estetik və funksional olaraq heç bir fəsad aşkar olunmadı.
Nəticə: Qabırğa qığırdağının çəp istiqamətdə kəsilib nazik səhifələr şəklində iatifadəsi estetik və funksional olaraq qənaətbəxş nəticələr verir. Qabırğa qığırdağının „oblique split metod-la kəsilib istifadə olunması funksional və estetik nəticələrin əldə olunması üçün etibarlı metoddur.

[PRS 10]

Rinoplastikada Osteotomiyaya bizim yanaşmamız.

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Məqsəd: Osteotomiyalar Rinoplastika əməliyyatı zamanı burun sümük piramidinin üst və orta 1/3-nin şəkilləndirilməsi məqsədilə həyata keçirilən cərrahi prosedurdur. Eyni zamanda osteotomiya prosesi burun yan divarının şəkilləndirilməsi zamanı diqqətli planlaşdırma tələb edən mühüm addımlardır.Osteotomiyalar osteotomlar, əl mişarları, mikromotor sistemləri həmçinin piezo kimi müxtəlif alətlər və cihazlarla həyata keçirilə bilir. Adları çəkilən metodların hər birinin özünəməxsus üstünlük və çatışmayan cəhətləri vardır. Piezo modern rinoplastikada istifadə olunan ən müasir metodlardandır ki, bu zaman sümüklər ultrasəs dalğaları ilı kəsilir və bu dalğalar sərt toxumalara həssas olduğu üçün yumşaq toxumaları kəsmir. Lakin piezo istifadə edərkən lateral

divarın dərisi ucluqların dəriyə təmasının olmaması üçün geniş sahədə disseksiya olunduğundan lateral osteotomiya xətinin dəqiq yerinin müəyyənləşməsi, oriyentasiyası bir qədər çətinlik törədir. Bu məqsədlə Piezo ilə lateral osteotomiya edilərkən lateral osteotomiya xəttinin yerinin dəqiq müəyyənləşdirilməsi üçün təklif etdiyimiz dişcikli osteotom istifadə olunaraq həyata keçirilən əməliyyatın nəticələrini dəyərləndirmək üçün bir çalışma həyata keçirildi.
Material və metodlar: 2018-2022 ci illərdə rinoplastika zamanı lateral osteotomiyalar həyata keçirilən 576 xəstə çalışmaya daxil edildi.Osteotomiyalar 452 qadın, 124 kişi xəstədə (yaş aralığı 16 ilə 55 yaş arası) aparıldı. Lateral osteotomiyalar bütün xəstələrdə piezo ilə həyata keçirildi.Lateral osteotomiya xətti şəxsi konstruksiyalı xüsusi dişcikli osteotomu endonazal istifadə edərək lateral sümük divarda lateral osteotomiya xətti cızıldı. Bunun üçün Apertura piriformisdə aşağı burun balıqqulağının bitişmə nöqtəsindən bir az yuxarı, yəni lateral osteotomiyada olduğu kimi qayçı ilə 3-4 mm disseksiya olundu. Sonra Jozef raspatoru ilə periostun altına keçib medial kantusa doğru tunel açıldı və yeni alətlə həmin yerdən açılmış tunelə girib xaricdən alətin üstündəki çıxıntını kontrol edərək lateral osteotomiya xətti cızıldı.Sonra dərinin altında vizual olaraq əminliklə həmin xətti izləyərək kontrollu şəkildə piezoyla kəsildi.
Nəticələr: Lateral osteotomiya xəttini izləyərək osteotomiyalar həyata keçirildiyindən kontrollu çalışılaraq dəridə yanıq, step deformasiyası kimi fəsadlaşmalar müşahidə edilmədi. Beləliklə, piezo ilə osteotomiya daha güvənli şəkildə, doğru yerdən və qısa zaman içərisində həyata keçirildi. Post op. dövrdə göyərmə, şişkinlik və ağrı digər metodlarda olanlardan daha az oldu.
Nəticə olaraq, Yeni təklif olunmuş osteotom istifadəsi həm açıq həm də qapalı rinoplastikada Piezo istifadəsini asanlaşdırmaq və fəsadlaşmalardan uzaq olmaq üçün çox yaxşı metod olduğunun qənaətindəyik.

[PRS 11]

3D approach to classification of the defects and deformities of the facial skeleton.

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Presentation type – Oral presentation

Background - The management of defect and deformities of the maxillofacial skeleton seems to be one of the most frequent and challenging problems in current maxillofacial surgery.
Aims/Objectives - In spite of numerous investigations done over past 100 years the approaches in preoperative diagnosis and planning is still debating. We attempt to introduce a new classification system of the defects and deformities of the facial skeleton.
Methods - A CT data of 40 patients was analyzed by the means of preoperative surgical planning software Materialise Mimics Research 21.01. All defect and deformities

were compared with a standard 3D virtual head within software and universal code was achieved in all cases. Additionally, the code was transferred to the electronic classification table with aim to achieve clinical diagnosis and treatment options. Alternatively, 5 consultants of Department of Oral and maxillofacial surgery were asked to establish diagnosis of defect and deformity in all 40 cases without access to the 3D classification template and based only on conventional methods. The results were compared.
Results/Findings - Significant difference between diagnosis created by the means of 3D template combined with electronic classification table and convention analysis was noted. Additionally, the treatment options weren't existing within conventional method of analysis
Conclusions - The 3D template approach showed reasonable results of diagnosis of the defects and deformities of the maxillofacial skeleton. The treatment options including into classification table seems to be helpful guideline especially in routine cases. We found this approach to be precise and applicable in cases of diagnosis and treatment planning of defects and deformities of the facial skeleton.

[PRS 12]

Treatment of masticatory muscle hypertrophy with botulinum toxin type A.

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Presentation type - Oral presentation

Background - Masticatory muscle hypertrophy can affect all the muscles of mastication, several muscles or just one muscle. It can occur either bilaterally or unilaterally, and most commonly the masseter muscles alone are affected. Causes of idiopathic hypertrophy of the masticatory muscles are commonly unknown. Some authors associate it with bruxism, habit of chewing gum, defective teeth, temporo-mandibular joint disorder, congenital and functional hypertrophies, and emotional disorders (stress and nervousness). Cosmetic problems, pain, and functional impairment on patients by masticatory hypertrophy require adequate treatment.
Aims/Objectives - We analyzed results of treatment of 12 patients by masticatory muscle hypertrophy were treated by using intramuscular botulotoxin A injections, in conjunction with a review of the literature. Bilateral hypertrophy of masseter muscle (7 patient), bilateral hypertrophy of both temporal and masseter muscle (3 patient) and unilateral hypertrophy of masseter muscle were defected in patients.
Methods - Standardized photography and clinical parameters were used to assess facial contour and masseter and temporal muscle thickness at baseline and successive follow ups.
Results/Findings - Significant masseteric and temporal muscle reduction was observed in subsequent follow ups. Returning of muscle thickness over the study period

started 4-6 month after procedure.
Conclusions - The treatment of temporal and masseteric hypertrophy with Botulinum toxin could be an effective option compared to conservative treatment or surgical intervention, although the review of the literature shows that this is only a temporary treatment. In fact, surgery still remains the best option. The treatment must be repeated every 4/6 months for 2-3 consecutive years before having stable benefits.

[PRS 13]

Periorbital nahiyyədə cərrahi yara sağalmasının kliniki müşahidəsi.

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Presentation type – Oral presentation

Son dövrlərdə blefaroplastika estetik əməliyyatların böyük bir qismini təşkil edir.
Bu yüksək tələbat gözəllik və gəncləşməyə olan marağın artması, həmçinin dəri sallanması səbəbilə görmə sahəsinin daralması ilə əlaqədardır. Periorbital nahiyyədə dərinin sağalma müddətini müəyyən etmək üçün tədqiqatımızda statistik analizlər apararaq kliniki müşahidələr etdik.
Tədqiqatımızda ümumi xəstə qrupuna 50 xəstə daxil etdik, onları 50 yaşdan yuxarı və 50 yaşdan aşağı olmaqla 2 ana qrupa ayırdıq. Bu ana qruplara əlavə xəstəlikləri olan(olmayan), pis vərdişləri olan(olmayan) xəstələri daxil etdik. Qruplarda 3 kişi və 47 qadın iştirak etmişdir. Ümumi xəstə qrupunda 5 nəfər pis vərdişi olan-siqaret çəkən, 16 nəfər əlavə xəstəlikləri olan xəstələr oldu.
Tədqiqatımızda üst blefaroplastika öncəsi və sonrası xəstələrin görünüşü arasındakı fərqləndirmə etdik. Hansı ki buraya yaş, yanaşı xəstəliklər və pis vərdişlər aid edildi. Kliniki olaraq isə əməliyyat öncəsi üst göz qapağı dəri səviyyəsinin göz qapağını tam və ya yarım örtməsi, əməliyyat öncəsi və sonrası palpebral ödemə, əməliyyat sonrası lokal yaranın sağalma müddəti, çapıq izinin azalma zamanına baxıldı.
Statistik analizlər nəticəsində xəstələrdə yanaşı xəstəliklərin olmasının yaranın sağalmasında, postop ödem səviyyəsində ciddi fərq etdiyi müşahidə etdik. Pis vərdişləri olan xəstə qruplarında dəri elastikliyi azalmasını, lakin ödem və sağalmada yan qrupdan fərq etməməsini gördük. 50 yaş altı xəstə qrupunda ümumi sağalma və çapıq toxumasının göz ilə görünən səviyyədə itməsi daha sürətli, 50 yaş üstü xəstə qrupunda isə daha zəif oldu.
Tədqitatımızda 1ci xəstə qrupunda 40% , 2ci qrupda 60% xəstə iştirak etmişdir. 1ci qrup xəstələrdə postop 7 gün sonra ödem azalması və yaranın 1cili sağalması 100%, uzun müddətli müşahidədə tikiş izinin itməsi 2-4 aya bitdi. 2ci qrupda isə 94% xəstələrdə yara sağalması 1cili olub, ödem səviyyəsi nisbətən yüksək idi. 6% xəstə öz ehtiyatsızlığı səbəbindən 1 göz qapağında tikiş xəttinə travma verərək, 2cili sağalmaya məruz qaldı. Bu qrupda çapıq toxumasının itməsi 3-6 ay oldu.

[PRS 14]

Innovative Approaches for Midfacial Reconstructions

Hoffmann J.

University Hospital Heidelberg, Department of Oral and Maxillofacial Surgery, Germany

Presentation type – Plenary Session

Complex bone defects can result from extended cystic lesion, might be due to a resection of a benign or malignant tumor with infiltration of the jaw or is seen as result of an extreme resorption in case of early loss of teeth.
However nowadays a variety of different treatment options allows for a patient specific approach. Bony regeneration usually is limited to 2D defects, whereas adjunct techniques (e.g. CAD-CAM titanium mesh) even might help to augment even in cases of severe defects.
As a last step on a reconstructive ladder using microsurgically revascularized bone serves as a reliable technique which is suitable for very extended lesions and a reduced quality of the recipient site.
With this presentation an overview of the present state of the art is given with a focus von virtual surgical planning (VPI).

[PRS 15]

The FORTE flap: Fibula (based) oral rehabilitation tissue engineered.

Kalavrezos N.

Head and Neck Centre at University College London Hospital, London, UK.

Presentation type - Symposium

The aim of this report is to introduce the use of the dermal substitute Integra® in the context of free fibula flap prelamination for mandibular reconstruction. Three cases of mandibular reconstruction with prefabricated and Integra-prelaminated vascularized fibula flaps are reported in this article. The patients reported in this case series presented with the following tumours: an extensive cemento-ossyfying fibroma, a multicystic ameloblastoma and an extensive calcifying epithelial odontogenic tumour. Virtual three-dimensional (3D) planning and 3D-printed cutting guides were used for the mandibulectomies, the flap harvest and the positioning of the implants. The dermal substitute Integra was used for prelamination instead of skin grafts. Treatment of all 3 patients was performed in two stages; the first consisted of the fibula prefabrication (dental implant insertion) and prelamination, and the second consisted of tumor resection and reconstruction with the vascularized implant-bearing fibula flap. Integra was shown to be able to generate complete mucosa-like tissue over the fibula flaps and in the peri-implant areas. The patients have been followed up

for 1, 3 and 7 years, respectively, with satisfactory prosthetic, functional and aesthetic results. None of the patients developed peri-implant disease. It was observed that prelamination with the dermal substitute Integra leads to development of mucosal lining with clinical features similar to oral mucosa. In this report of three cases, use of Integra as part of the prelamination and prefabrication process, instead of skin grafts, appears able to clinically generate mucosal lining with avoidance of skin grafts.

[PRS 16]

Jaw Reconstruction in Primary and Secondary Tumors.

Kropotov M.A., Saprina O.A., Dobrokhotova V.Z.

National Medical Research Center of Oncology named after N.N. Blokhin, Ministry of Health of the Russian Federation, Moscow, Russian Federation

Relevance: The necessity for segmental resection of the lower jaw in oncology arises in cases of widespread malignant tumors of the oral cavity mucosa and primary tumors of the lower jaw. This surgical intervention leads to disruptions in chewing, swallowing, speech functions, as well as significant aesthetic changes. Even in cases of successful cancer treatment, a considerable decrease in the patient's quality of life is observed. The removal of extensive tumors in the lower facial area with resection of the lower jaw results in prolonged combined (bone and soft tissue) defects. Reconstructing the defect of the lower jaw and soft tissues simultaneously with the oncological stage of surgical treatment allows for achieving good functional and aesthetic results without extending the rehabilitation period.
Materials and Methods: Among various types of lower jaw resections (610 cases) used in head and neck tumors, segmental resection with simultaneous reconstruction was most frequently performed (308 cases, 50.5%). Indications for segmental resection of the lower jaw included primary tumors of the lower jaw, destruction extending to the mandibular canal, destruction of the lower jaw in cases of secondary edentulism and alveolar atrophy, tumor infiltration extending significantly along the body of the lower jaw. The following methods were used for jaw reconstruction: displaced skin-muscle-bone flaps (11 cases, 3.6%), reconstructive plates (112 cases, 36.3%), revascularized autografts (185 cases, 60.1%). Indications for using reconstructive plates were doubtful oncological prognosis due to tumor process prevalence (T4a, N2c-N3, M1, G3), severe comorbid pathology, lower limb vascular pathology, patient refusal of more complex reconstruction methods. Revascularized autografts included pubic (33 cases, 17.8%) and iliac crest grafts (152 cases, 82.2%). Indications for autograft use were defects in the chin area, significant bone defect extension, radical dose of radiation therapy, favorable oncological prognosis. Indications for performing segmental resection with exarticulation were destruction of the lower jaw with extension to the branch, joint process, destruction of the lower jaw body with extension to the mandibular canal.
Results: Various complications were noted in 19 patients (17.4%) when using reconstructive plates. The use of revascularized autografts in 29 cases (15.6%) was accompanied by mild and moderate complications, and in 10 cases (5.4%), graft removal was required. When evaluating the three-year oncological results in patients with segmental resection of the lower jaw with exarticulation, progression was observed in

45% of cases for squamous cell carcinoma, including recurrence of the primary tumor in 40% and distant metastases in 5%. For non-epithelial malignancies, recurrence occurred in 48% of cases, with 28% showing recurrent tumors and 20% distant metastases.
Conclusions: Segmental resection of the lower jaw with or without exarticulation should be accompanied by simultaneous defect reconstruction. In cases of extensive defects of the lower jaw, a combined defect, and post-radiation treatment, a revascularized iliac crest autograft is the method of choice. A revascularized autograft with a formed joint surface is an optimal reconstruction method for exarticulation, allowing the restoration of lower jaw function. The use of CAD/CAM technologies simplifies and accelerates the graft modeling process, enabling more precise lower jaw reconstruction, thus improving cosmetic and functional outcomes.

[PRS 17]

Closed Approach Primary Rhinoplasty: Our Algorithm and Patient Selection.

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Medlaz Plastic Surgery Clinic, Moscow, Russia

Presentation type – E-Poster

Background - Closed approach rhinoplasty often involves a longer duration and demands advanced surgical skills compared to its open counterpart. We present an algorithm aimed at simplifying the closed approach to achieve natural-looking outcomes.
Aims/Objectives - To analyze the effectiveness of our primary closed rhinoplasty algorithm and delineate the criteria for patient selection.
Methods - - Patient Selection: The best candidates for this operation possess a high nasal dorsum, minimal or no nasal tip deviation, an increased interdomal distance, and thin soft tissue." - Surgical Technique: The procedure entails bilateral intercartilaginous incisions using a No. 15 blade. The soft tissue envelope covering the dorsum of the cartilaginous and bony framework is dissected in the supraperichondral and subperiosteal planes. The dissection is limited to the dorsum so as to preserve the attachment of the soft tissue envelope to the lateral portion of the nasal bone. When the elevator passes into the correct layer of detachment in the area of the nasal bones, it is permanently fixed and does not move anywhere. The cartilage penetration in the lower lateral cartilage area is extended by the incision with the blunt-ended scissors in the cephalic direction simultaneously through mucosa and cartilage. The mucosa of resulting triangular flap is then dissected. The resection of the cephalic edge of the lateral nasal crura is performed. To reduce the distance between the points of the tip of the nose, 3-4 incisions 1-2 mm long are made in the area of the domes on the head side, not reaching the edge of the cartilage. This fact weakens the lateral cartilage segment and makes the angle between the medial and lateral cartilage sharper. We use a Volkmann's spoon to thin the soft tissues in the supra-tip area. The fragment of the cartilage dorsum of the nose is cut with a number 15 blade.

Double guarded osteotome is placed under the cartilage of the dorsum to remove the remaining bone of the nose hump. Hump is extracted en-block using a Kocher clamp. Then the lateral 'low to high' osteotomy is performed. A series perforations are made along the infracture line. Strut graft is placed between medial crura of alar cartilages utilizing an infracartilaginous incision along the columella margin in the soft tissue pocket. The pocket is formed within 3 mm of the anterior nasal process. The size of the cartilage graft is on average 5x20mm.
Results/Findings - The results of our work shows that the average duration of operation can be 40 minutes. The level of patient satisfaction with the correct selection of patients is high. Miscalculation of soft tissue thickness can lead to nasal deformation like 'parrot's beak' and lowered nose tip.
Conclusions - Our closed approach to primary rhinoplasty, when paired with appropriate patient selection, not only simplifies the procedure but also consistently achieves a natural nasal appearance while reducing operation time.

[PRS 18]

Endoscopic aesthetic facial surgery.

Mammadov D.

Livbonadea Hospital Baku, Azerbaijan.

Presentation type – Symposium

Background - The endoscopic approach to forehead and midface lifting has become popular method of face rejuvenation with minimal incisions. We have performed 63 endoscopic facelift procedures in the last four years. Forehead lifting technique included five small scalp incisions, wide subperiosteal elevation, endoscopic myotomy and forehead tissue fixation with srews, superficial temporal fascia (STF) suture to deep temporal fascia (DTF).
Aims/Objectives - We observed cheek elevation, improving nasolabial line, increasing volume of malar region, elevating lip angles in patients after endoscopic midface lift. We have found that important advantage of subperiosteal midface lift, when performed in conjunction with endoscopic brow lift, is its ability to move the cosmetic eye unit, proportionally, leading to a harmonious facial appearance. Endoscopic facelift is effective procedure for face rejuve- nation especially for eyebrows and cheek elevation.
Methods - We introduced endoscopic approach to forehead and midface lifting between 2017 to 2020. It was the first experience in endoscopic aesthetic facial surgery in the Baltic States . Forehead lifting. We determined the primary and conditional indications for endoscopic forehead lifting . Primary indications: · Ptosis of the eye-brows; · Significant asymmetry of the eyebrows. Conditional indications: · Distance between eyebrows and eyelids too small; · Vertical glabella frown lines; · Transversal forehead wrinkles; · Transversal wrinkles of the nasal root. Endoscopic facelift procedures were done with local anesthesia and monitored intravenous sedation or general anesthesia.
Results/Findings - Endoscopic subperiosteal face rejuvenation proce- dures have been performed in 63 clinical cases. There were 61 female and 2 male patients. Age

of patients, who underwent endoscopic front lift, ranged from 22 to 63 years (mediana 46), patients, who had endosopic front lift and midface lift procedure, were in the range from 27 to 54 (mediana 40). In our series, complica- tion rate was 7.5 percent and included frontal branch weakness (n=2), hematoma (n=1), infraorbital nerve paresthesia (n=1) and asymmetrical smile (n=1); 4.5 percent of complications occurred during our first 10 operations. One patient experienced 2 complications: hematoma and infraorbital nerve paresthesia. In the other 57 clinical cases we had only 2 complications: transient frontal branch weakness and asymmetrical smile.
Conclusions - Based on our experience we have found endoscopic subperiosteal rhytidectomy to be an effective proce- dure designed to rejuvenate the upper and middle thirds of the face for young patients with a relatively small amount of skin relaxation. However, the endoscopic subperiosteal lift must be performed by experienced surgeons due to encountered difficulties.

[PRS 19]

Complication of Blepharoplasty: prevention and management.

Mamedzadeh R.

Department of oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Oral presentation

Blepharoplasty, also known as eyelid surgery, is a common cosmetic procedure performed to enhance the appearance of the eyelids. While it is generally considered safe, there are potential complications that can arise. This abstract will provide a brief overview of the complications associated with blepharoplasty.
Complications can be categorized into immediate and delayed complications. Immediate complications include infection, excessive bleeding, injury to the eye, and negative reactions to anesthesia. These complications can be managed with prompt medical intervention.
Delayed complications of blepharoplasty include issues with wound healing, scarring, asymmetry, dry eye, overcorrection or undercorrection, and ectropion or entropion. Wound healing problems can lead to poor scar formation, which may require additional treatments or further surgery. Asymmetry refers to uneven eyelid appearance, which can be a result of both surgery and natural healing processes. Dry eye can occur due to disrupted tear production, and appropriate management is necessary to prevent discomfort and potential long-term complications. Overcorrection or undercorrection can result in unsatisfactory aesthetic outcomes, and revision surgery may be required. Ectropion and entropion refer to eyelid malpositioning, where the eyelid turns outwards or inwards respectively, causing irritation and possible vision impairment.
In conclusion, while blepharoplasty is generally a safe procedure, it is important to be aware of potential complications. Proper preoperative assessment, surgical technique, and postoperative care can help mitigate these complications. Patients considering blepharoplasty should have a thorough discussion with their healthcare provider to understand the potential risks and benefits associated with the procedure.

[PRS 20]

Distraction ostheogenesis. preprosthetic rehabilitation of patients with extensive defects of the jaws

Melikov E., Drobyshev A., Shulakov V., Ali R., Lashuk S.

Moscow State University of Medicine and Dentistry named by A.I. Evdokimov, Moscow, Russia.

Presentation type – Symposium

Background - Nowadays the number of adult patients with complete and partially edentulous, complicated by the defects of the jaws, which need rehabilitation with the use of dental implants is still very high. More stable, aesthetically satisfactory result, and early restoration of function can be achieved with a combination of a multistage surgery with rational prosthetic on dental implants.
Aims/Objectives - Defects of the jaws with extensive bone deficit ,caused by trauma, inflamation or operations for malignancies of maxillofacial region, complicates dental implantation. The presence of such defects in the jaw bones requires measures to create optimal conditions for further dental implantation.
Methods - During the period from 2010 to 2023 more than 470 patients with extensive defects of alveolar ridge of mandible and maxilla due to different ethiological factors were treated in our clinic. Operation planning was carried individually. Computer software, lithographic models, distraction devices and dental implants were used during treatment.
Results/Findings - Successful rehabilitation of adult patients with defects of alveolar parts of maxilla and mandible after different ethiological factors was conducted. As one of the step of rehabilitation of this patients was used the method of distraction osteogenesis.
Conclusions - Advantages of distraction osteogenesis may provide a solution for many problems associated with the duration of the treatment, with different conditions wich cannot be treated with classical preprosthetic surgery.

[PRS 21]

Facial feminisation surgery: 10-year experience.

Meningaud J.P.

Department of Plastic and Maxillofacial Surgery at the Henri Mondor University Hospital, Paris, France.

Presentation type – Symposium

Feminization surgery (FFS) is often the first procedure requested by patients wishing to undergo gender-affirming surgery. This study aims to evaluate the applicability and effectiveness of deep plane facelifts in FFS. The authors conducted a prospective

study that included patients who requested a deep plane facelift as a standalone procedure to achieve a more feminine facial appearance as the only procedure of FFS. These patients underwent deep plane facelifts to achieve a more feminine oval face shape and increased tissue projection of the zygomatic-malar region. To assess the effectiveness of the procedure and patient satisfaction, the Face-Q scales, Face and Neck lift Objective Photo-Numerical Assessment Scale, the Satisfaction With Life Scale, and the Subjective Happiness Scale were applied preoperatively and one year after surgery. Thirty-six patients were included in the study. A statistically significant difference ($p < 0.005$) was observed between pre and postoperative scores. The re-positioning of the malar fat pads increased the malar volume, providing a more oval overall shape of the face, which is typically feminine. No major complications were observed. Despite our encouraging results, new studies with a larger sample of patients are needed to support the benefits of the deep plane facelift as part of FFS to elevate this technique from an ancillary to a routine procedure for patients undergoing gender affirmation surgery.

[PRS 22]

A case series of 7 face transplant: the long-term follow-up.

Meningaud J.P.

Department of Plastic and Maxillofacial Surgery at the Henri Mondor University Hospital, Paris, France.

Presentation type – Symposium

Background: More than 30 face transplantations have been done worldwide since 2005 but no documented long-term follow-up has been reported in the literature. We aimed to answer remaining question about the long-term risks and benefits of face transplant.
Methods: In this single-centre, prospective, open study, we assessed 20 patients presenting with facial defects. Ten patients were selected, and, after three were secondarily excluded, seven were transplanted: two with neurofibromatosis 1, one with a burn, and four with self-inflicted facial gunshot injuries. We report the long-term outcomes of six face allotransplant recipients at an average of 6 years (range 3·4-9 years) after the transplantation. All admissions to hospital except for planned revisions and immunosuppressive follow-up therapy were reported as adverse events (safety endpoint). Predefined immunological, metabolic, surgical, and social integration endpoints were collected prospectively. Patients underwent quantitative health-related quality of life assessments through Short Form 36 health questionnaires. This study was registered with ClinicalTrials.gov, number NCT00527280.
Findings: Two of seven patients died: one at 65 days due to transplant destruction with concomitant pseudomonas infection and the second at 3·4 years after transplantation by suicide. The six patients alive at long-term follow-up presented with functional transplants. Safety endpoints were related to infection in the first month, acute rejection from 1 day to 7 years after transplantation, or side-effects of immunosuppressive therapy. Recurrent rejection episodes justified maintenance therapy with

high-dose steroids at high levels in all patients at last follow-up, yet none of the patients developed diabetes. Three patients were found to have hypertension with one requiring therapy. All patients had a noticeable reduction in glomerular filtration rate. All recipients and their families accepted their transplant. Improvements in social integration and quality of life were highly variable among the patients and depended on baseline levels and psychiatric comorbidities.
Interpretation: These long-term results show the crucial effect of patients' social support and pre-existing psychiatric conditions on the risk-benefit ratio of facial transplantation. Careful preoperative patient selection and long-term postoperative follow-up programmes under strict institutional review board controls should be used for any future grafts of this type.
Funding: Protocole Hospitalier de Recherche Clinique (PHRC) National.

[PRS 23]

The role of distraction osteogenesis in oral and maxillofacial surgery

Nkenke E.

Medical University of Vienna, Viena, Austria.

Presentation type – Plenary session

Mandibular and maxillary hypoplasia are common dentofacial deformities which require a combination of orthodontic and surgical treatment. The introduction of the technique of distraction of the craniofacial skeleton represented a great advancement in the practice of orthognathic and reconstructive surgery. It has become a widely accepted technique for the reconstruction of hypoplastic mandibles. Distraction has been considered as the technique of choice in many clinical situations owing to the relative safety of the procedure, reduced hospitalization duration, low requirement for blood transfusions, and elimination of the need to harvest bone grafts, in addition to the desired expansion of soft tissues that occurs concomitantly with local bone formation. Distraction can improve the appearance of the face as well as the airways of these patients. It is a less invasive, faster technique with an apparently lower morbidity than the traditional craniofacial reconstruction methods. Although mandibular distraction is an accepted therapeutic alternative for hypoplastic jaws, this surgery is not currently routinely performed. This aspect is surprising because distraction is most effective for example in elongating the deficient mandible. In addition to its positive effect on facial appearance, distraction osteogenesis is an effective procedure for the treatment of airway obstruction associated with congenital craniofacial defects involving hypoplasia of the jaws.
As a consequence of sustained research and design and collaboration with the manufacturers, clinicians have developed various devices to improve the results of distraction. These devices of various shape and size are developed especially for intraoral use in specific anatomical locations of mandible and maxilla.
Distraction osteogenesis is a good alternative for the treatment of hypoplastic jaws, often being the first indication in some clinical situations. This procedure apparently has less morbidity than the classic reconstructions of the jaw and has the add-

ed benefit of also lengthening the soft tissues. In addition, there is a likely benefit to the airways. A qualified and complete multidisciplinary team greatly increases the chances of success in this type of treatment.

[PRS 24]

Versatility of Subscapular System in Head & Neck Reconstruction.

Prabhu S.

Oxoford University Hospitals, Oxford, UK.

Presentation type – Plenary session
Subscapular System provides multiple options of reconstruction for Head & Neck defects. This lecture will discuss various options with examples. The author will also discribe the novel technique of Muscle sparing harvesting of Scapula flap.

[PRS 25]

Effect of upper eyelid blepharoplasty on corneal astigmatism in patients with dermatochalasis.

Sakkal Z., Abdulmohsem K.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type - Oral presentation

Background - Blepharoplasty is one of the most common eyelid surgeries. The most common cause of upper eyelid blepharoplasty is dermatochalasis, which is characterized by the formation of an excess skin fold over the upper eyelid due to age-related laxity of the skin and soft tissues of the orbit. In addition to aesthetic concerns, heaviness, periorbital discomfort, and functional disturbances are indications for surgical treatment of blepharochalasis.
Aims/Objectives - The aim of this study was to evaluate the effect of upper eyelid blepharoplasty on corneal astigmatism in patients with dermatochalasis.
Methods - This prospective study assessed corneal astigmatism in 36 patients with varying degrees of dermatochalasis before and 1, 2, and 12 weeks after upper blepharoplasty. This group of patients was represented by 28 women and 8 men, aged 29 to 65 years. Preoperative examination included: examination, palpation, ophthalmological, anthropometric, photographic. The change in the values of corneal astigmatism was determined in accordance with the marginal distance of the reflex of the patients, who were divided into three groups: 1 group (18 patients) ⊠ 3.5 mm, 2 group (13 patients) 2-3 mm and 3 group (5 patients) < 2 mm.
Results/Findings - The average values of corneal astigmatism remained unchanged in the postoperative period in patients of the 1st and 2nd groups. According to the

results of study, the parameters of corneal astigmatism changed in patients of the 3rd group, 3 months after the operation. A statistically significant increase in corneal astigmatism was: before surgery 0.68 ± 0.39; after surgery 0.85 ± 0.36, p = 0.006. Conclusions - The study indicates the importance of consulting an ophthalmologist before blepharoplasty in order to assess risk factors for glaucoma and plan for surgical treatment of corneal refraction or cataract in the near future.

[PRS 26]

Craniomaxillofacial Reconstruction.

Sartawi M.

Jordan British Specialty Center for Maxillofacial Surgery & Oral Implant Centre, Jordan.

Presentation type – Plenary session

Reconstruction is required in the following situations:
PART I) Post Traumatic; in severe trauma as in RTA, War injuries and industrial accidents were a great loss of soft tissue, bone or both with resultant deformity necessitate reconstruction.
PART II) For Congenital Deformities; misfortunate patients with congenital deformities involving the orbit and cranio maxillofacial region as in Hypertelorism, A pert syndrome, and Crouzon syndrome may require surgical intervention.
PART III) Following Pathology; Although the vast majority of orbital Maxillofacial and skull base tumors are benign tumors, they pause a real problem to both the patient and the ophthalmic surgeon ,simply because of its awkward location in the orbit , causing exophthalmos of the eye , limitation of movement & diplopia and may cause bad vision or even blindness due to pressure induced .They can also invade neighbouring structures i.e. the brain , frontal, ethmoid and maxillary sinuses as well as the palate and oro-pharynx causing further damage . Such tumors require radical surgical approach.

[PRS 27]

Nonsurgical Profiloplasty: Sculpting the Future of Facial Aesthetics with Minimally Invasive Techniques

Soltanova R.

LB Clinic, Baku, Azerbaijan.

Presentation type – Symposium

Nonsurgical profiloplasty, an innovative approach to facial aesthetics, offers individuals the opportunity to achieve a harmonious and balanced facial profile without undergoing invasive surgical procedures. This emerging trend in cosmetic enhance-

ment leverages non-invasive techniques to sculpt and refine key facial features, resulting in a more aesthetically pleasing and proportionate appearance.

Central to the concept of nonsurgical profiloplasty is the idea of achieving facial balance and symmetry through a combination of minimally invasive treatments. These treatments typically include the use of dermal fillers, Botox, and other cosmetic injectables to strategically contour and reshape various facial areas such as the chin, jawline, and nose. By enhancing these features, a skilled practitioner can create the illusion of a more defined and harmonious facial profile.
One of the key advantages of nonsurgical profiloplasty is its minimal downtime and reduced risks compared to traditional surgical interventions. Surgical procedures often involve significant recovery periods, potential complications, and irreversible changes. In contrast, nonsurgical options provide a non-permanent solution, allowing individuals to experiment with their desired changes before committing to long-term alterations.
Individualized treatment plans are crucial in nonsurgical profiloplasty. Each person's facial structure is unique, necessitating a tailored approach that takes into account their existing features and desired outcome. A skilled practitioner will conduct a comprehensive assessment, discussing the patient's goals and expectations, and then recommend a combination of treatments that will yield the best results.
While nonsurgical profiloplasty can deliver impressive improvements, it's important for individuals to manage their expectations realistically. The changes achieved through non-invasive techniques might be more subtle compared to surgical interventions, but they can still yield noticeable and satisfying outcomes.
In conclusion, nonsurgical profiloplasty is an evolving field within the realm of cosmetic enhancement, offering individuals the chance to enhance their facial profiles without undergoing surgery.

[PRS 28]

Cosmetic Otoplasty

Walji S.

Jeroen Bosch Hospital, The Netherlands

Presentation type – Symposium

Otoplasty is often casually approached as a quick and relative painless procedure, but the surgeon who is most knowledgeable understands the complexity of this simple operation.
Overcoming intrinsic cartilaginous spring of the native oracle to reproduce a natural symmetrical and stable contour remains a very challenging proposition.
I would therefore like to take you through of some of the aspects of cosmetic otoplasty.
My presentation will be focusing on the following aspects, historical perspective, timing of otoplasty, aesthetic parameters, techniques and pitfalls.

Head and Neck Oncology & Surgery[HNS]

[HNS 01]

Tumors of the Cranio-orbital region: A comprehensive approach from diagnosis to reconstruction

Acero J.

Ramon y Cajal &Puerta de Hierro Univ Hospitals, University of Alcala, Madrid Spain

Presentation type – Plenary session

Tumors affecting the craniofacial region are challenging for the cranio-maxillofacial surgeon. A comprehensive planning of treatment and reconstruction is mandatory. In this lecture we review the impact of computer assisted surgery including virtual planning and navigation assisted surgery in the treatment and reconstruction of tumors affecting the cranio-facial region

[HNS 02]

My experience in endoscopic dacryocystorhinostomy.

Akbarov E.

National Prime Hospital, Baku, Azerbaijan.

Presentation type – Symposium

Dacryocystorhinostomy (DCR) is recognized as the most suitable treatment for patients with obstructions of the lacrimal system at the level of the sac or in nasolacrimal duct. The blockage can be due to trauma, prior surgery, tumor or inflammatory medical conditions, but often there is no identifiable cause. External DCR was described in early 20th century. The introduction of nasal endoscopy and endoscopic sinus surgery in the 1980s paved the way for a transnasal endoscopic approach to lacrimal system. Endoscopic DCR (E-DCR) using telescopes has gained a lot of momentum among otolaryngologists. Since the outcomes are comparable to the external approach.

[HNS 03]

Epidemiology of head and neck cancer in Azerbaijan and the experience of the National Center of Oncology in the treatment of this group of patients.

Aliyev A.

National Center of Oncology of the Ministry of Health of the Republic of Azerbaijan,

Baku, Azerbaijan.

Presentation type – Plenary session

Head and neck cancers appear to be increasing worldwide and causing significant morbidity and mortality. This work aims to introduce the epidemiological trends of head and neck cancers in Azerbaijan over a five-year period (2018-2022) and to present the experience of the National Center of Oncology in the treatment of this group of patients. Over the last 5 years, head and neck cancers accounted for more than 4% of all cancers in Azerbaijan and were responsible for more than 3% of all cancer-related deaths. These cancers were approximately 3 times more common among men than among women. The male-female difference was most apparent for laryngeal cancer. As for the age situation, head and neck cancers among people over 50 were diagnosed more often than among people of younger ages. Additionally, the global tendency of rising incidence of late-stage head and neck cancers was also observed in Azerbaijan. Around half of new cases were diagnosed at late stages (stage III or IV). The treatment applied at the National Center of Oncology targets to eradicate the tumour completely, to minimize morbidity while maintaining function and cosmesis, and to improve the patient's life quality. Patients with locoregionally advanced head and neck squamous cell carcinoma receive a multimodal treatment including surgery followed by adjuvant radiation (chemo) therapy or concurrent chemoradiotherapy with or without salvage surgery. In general, head and neck cancers continue to remain a serious health burden with an increasing incidence of late stage cases; and the majority of cases require a complex management including multiple modalities.

[HNS 04]

Maxillofacial tumors treatment and reconstruction - are we providing the ultimate treatment?

Altuwairgi O.

Hospital King Abdulaziz Medical City, Riyadh, Saudi Arabia

Presentation type – Symposium

The presentation will go through the advances in the recognition of tumors and the progress built on the reconstruction and providing the advance and more pleasing outcome of building the facial structure after the resection of the tumors.
Though as much advances in the post resection facial reconstruction, the patient satisfaction and function regain fall short of expectation. Brining the audience up to date the alternative immunotherapy treatment and their success

[HNS 05]

Quality of life in patients with oral cancer receiving different reconstruction methods.

Davudov M.M.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Symposium

Objectives: Surgical treatment of oral cancer can lead to dramatic aesthetic and functional consequences that can be partially prevented by reconstructive methods. After such important oncological procedures, a lot of research has been done to evaluate the results retrospectively. The purpose of this study is the quality of life. The main objective of this study was to assess the quality of life as the primary endpoint for patients who received a prospective treatment for cancer containing an oral cavity and that require reconstruction with cancer using various reconstruction methods in Azerbaijan.
Materials and Methods: In this prospective clinical study, all participants with oral cancer were examined. The study plan assessed the quality of life after surgery after 6 months to assess differences in follow-up using standardized EORTC H&N35, H&N43 QoL questionnaires. During the period from 2011 to 2018, 260 patients with oral cancer were treated and 216 of them needed reconstruction.
Results: A total of 120 patients presented with advanced stage of the disease and underwent mandibular resection with no reconstruction (n=40), reconstruction with plate (n=41), and reconstruction with flap (n=39) and 96 patients presented with soft

tissue defects after primary tumor resection showed significant improvement without reconstruction and reconstruction of QOL H & N43. Of the 96 patients, 36 patients did not receive a flap, 31 patients received local flaps, and 29 patients received distal-regional regional flaps.
Conclusion: Reconstruction improves the quality of life of patients. In general, the research results show that the reconstruction of soft tissue defects with distal-regional flap compared with the primary clothe and local flap leads to an improvement in the quality of life of patients with oral cancer. For mandibular defects the findings indicated that patients in "no reconstruction" group reported worse conditions compared to patients who underwent the plate or flap reconstructions.

[HNS 06]

New diagnostic approach to Eagle Syndrome.

De Ponte F.S.

Department of Biomedical, Dental Sciences and Morphoogical and Funtional Images, Maxillo-Facial Surgery Unit, University Hospital "G. Martino", University of Messina, Messina, Italy.

Presentation type – Plenary session

Eagle Syndrome is a rare symptomatic condition generally caused by abnormal elongation of the styloid process or calcification of stylo-hyoid ligament. Eagle Syndrome is easily misdiagnosed due to its vague symptoms of cervico-facial pain, able to mimic other possible causes such as temporomandibular joint disease, migraine headaches, and cranial nerves neuralgias. The anatomical relationship between the Styloid Process and muscular, vascular and neural structures with which Styloid Process can take contact, differs between different head and neck movements. Tilting, Flexo-Extension and Rotation analysis allowed us to define the Eagle Syndrome as a "Dynamic-Positional" condition. Any tool, among those suggested in literature, from Angio-CT to Trans-Oral Carotid Artery Ultrasonography, have to be performed according to the dynamic/positional pathogenesis of the Syndrome. We believe that a change of paradigm in the study of neck structures shifting our approach from a static to a dynamic mode is needed.

[HNS 07]

Evidence Based Management of the N0 neck in Oral Cancer

Ord R.A.

University of Maryland, Maryland, USA.

Presentation type – Plenary session

There is controversy regarding the management of the N0 neck in early T1-2 stage oral cancer. Three possible surgical managements have been advocated, excision of the primary and observe the neck, elective selective neck dissection END, and sentinel node biopsy. This presentation will discuss the evidence in the literature for the use of END, what factors predict occult disease, which type of neck dissection is best and when is adjuvant therapy required. Prospective randomized controlled trials and systematic reviews/metanalysis will be used whenever possible.
Currently elective suprapmohyoid neck dissection is the treatment of choice for all T2 NO oral squamous cell carcinomas SCC, and T1 N0 SCCs with a depth of invasion 3-4 mm. Most studies have been performe on cases of oral tongue cancer. Radiation therapy is recommended for patients with more than 1 positive nodeeven withmicroscopic disease, Chemoradiation is given in cases with extranodal extension.

[HNS 08]

Surgical aproach to the otogenic facial palsy as a complication of chronic otitis media

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Department od ENT, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Symposium

Fasial palsy is considered as most undesirable complication of clinic COM. Different resources indicate 5-8% in cases of prevalence of facial palsy as a complication of COM. This percentage convenient to post-Op cases also. There are two factors main roles in etiology of otogenic facial palsy during COM. 1st of them is the infection toxic factor, 2nd is the compression mechanism of fallopian canal which press facial nerve by cholesteotoma or osteitis process. Compression mechanism by cholesteotoma are more common in COM. A total 243 COM patients done ear surgeries through a period of 15 years under our control. 158 of them were male, 85 of them were female. Age between 15-76. 34 of them (14%) were diagnosed pre-Op facial palsy. High indicators Pre-Op facial palsy cases relate more complicated patients applies our hospital for the treatment. 15 of them male and 19 female patients. After the occurrence of Facial paralysis patients application period to the ENT specialist were between 3-30 days. Only 21 of them were radiologically confirmed destruction

of fallopian canal. 5 of them detected destruction of lateral semicircular canal. As described above all patients underwent otologic surgeries in temporal bone. The carious part of fallopian canal and granulation tissue has been rehabilitated. The 13 patients have not been detected any destruction. The periosteum obturated the horizontal semisircular canal during the labyrinth destruction. The symptoms has increased first 3 days of Post-Op period of patients with destruct of Fallopian canal but vertigo symptoms disappear completely. Clinical dynamics were not observed which not detected of destruction of fallopian canal. All patients were treated by corticosteroids based on the grand scheme. Positive dynamic observed in destructive fallopian canal patients after fourth day of the treatment and function is rehabilitated in 10 th day. It is the 6 th day of starting positive dynamic and completely rehabilitation of function is 12 th day in other patients. Only in 3 patinents it was not possible to fully restore the function of nerve. After longterm 6 months of treatment 2 of them were restored the function but 1 of them were not observed positive result. It should be noted that the completely rehabilitation of the innervation of lower lip fails in all patients. In conclusion we consider first of all ear surgeries (radical mastoidectomy) as a treatment of otogenic facial paralysis patients and then corticosteroid therapy is appropiriate.

[HNS 09]

Contemporary surgical management of advanced oral cancer.

Perisanidis C.

Department of oral and maxillofacial surgery, University of Athens, Greece.

Presentation type: Symposium

Advanced oral cancer poses a significant challenge in terms of staging and surgical treatment. Staging is crucial for determining the extent of disease and guiding treatment decisions. Surgical intervention remains a cornerstone in the management of advanced cases, with procedures ranging from tumor resection and neck dissection to microvascular reconstruction. Adjuvant therapies, such as radiation, chemotherapy and immunotherapy, often complement surgical treatment to optimize outcomes. However, the complexity of advanced oral cancer necessitates a multidisciplinary approach, incorporating expertise from surgical oncologists, radiation oncologists, medical oncologists, and supportive care teams, to achieve the best possible outcomes for patients.

[HNS 10]

Reducing the impact of surgery-Wisdom tooth surgery to Harvesting of Scapula Flap.

Prabhu S.

Oxoford University Hospitals, Oxford, UK.

Presentation type – Symposium

Head & Neck Surgery can be life saving but also life changing. This is true for various surgeries that we perform. This lecture compiles many small tricks and techniques to reduce the impact of surgery.

[HNS 11]

Management of Obstructive sleep apnea.

Rachmiel A.

Department of Oral & Maxillofacial Surgery, Rambam Medical Center. Technion Faculty of Medicine, Haifa, Israel

Presentation type – Symposium

Introduction: Obstructive sleep apnea may appear in the paediatric population, in adolescents' patients or in adults. OSA in paediatric populations is often associated with congenital craniofacial malformations due to hypoplastic mandible and decreased pharyngeal airway. Some showed respiratory distress and some were tracheotomy dependent. The adult OSA is a developing situation due to hypoplastic jaws associated with hyper laxity of the muscles and obesity.
Materials and methods: The paediatric OSA Patients were treated by mandibular distraction osteogenesis. Patients were treated by using external or internal distraction devices. The adolescence OSA patients manifest short hypoplastic mandibular ramus and steep occlusal plane and were treated by Counter clockwise maxillo mandibular advancement usually by mandible first. The adult OSA of none syndromic patients were treated by Maxillo mandibular advancements using conventional orthognathic methods.
Results: In all pediatric patients, an increase in mandibular length and pharyngeal airway was obtained. When using external distraction devices, an average mandibular elongation of 30mm was obtained. Using internal devices, the average advancement was 23mm. These devices are more comfortable to the child with a precise and predictable vector of lengthening. However, there is a need for a second operation to remove them under general anaesthesia. Final airway was 5 times larger in size. In Adults, MMA surgery advanced the maxillomandibular complex with significant increase of the airway.
Conclusions: Internal devices are more comfortable to the child with a precise and

predictable vector of lengthening. They leave less visible skin scar and should be considered as a first choice. Their main disadvantage is the need for a second operation for removal. External devices may be used with the main drawback of child discomfort and the risk of pin loosening that results in replacement or shortening of the retention period. In Adults MMA improved the airway and decreased OSA symptoms.

[HNS 12]

National experience in Interdisciplinary approach in H&N pathology

Reshetov I.

Sechenov University, Moscow

Presentation type – Symposium

There is an annual increase in pathology of the organs of the head and neck all over the world.
In the Russian Federation to improve early diagnosis and better routing of patients, early diagnosis of pathology of the organs of the head and neck is carried out.
The interdisciplinary team carries out examinations: by the open access method, probe expeditions, additional services in multidisciplinary clinics, telemedicine.
More than 100,000 participants were examined. Chronic pathology was detected in 25.6%. Facultative precancerous in 20.1%, obligate precancer – 5.1%, malignant tumors in 0.5%. carcinoprevention was performed in 30.0% of patients.
The interdisciplinary approach demonstrates the effectiveness of screening. The risk group is undergoing cancer prevention. Timely routing between specialists allows to perform high-tech treatment with a high level of rehabilitation.

[HNS 13]

The role of orthognathic surgery, aesthetic surgery and surgical oncology in the treatments of severe obstructive sleep apnea.

Sartawi M.

Jordan British Specialty Center for Maxillofacial Surgery & Oral Implant Centre, Jordan

Presentation type – Plenary session

This lecture is designed to provide clinicians with the theoretical knowledge, skill sets and confidence to investigate, diagnose and operate on these usually challenging cases of Severe Obstructive Sleep Apnea patients with different etiology requiring various surgical treatments. Good pre-operative planning and workout would eventually lead to both excellent clinical surgical outcome and satisfactory psychological results.

This lecture includes tutorials on the following surgical procedures; Orthognathic Surgery, Rhino Septoplasty and Skull Base Surgery.

[HNS 14]

Evolution of Neck dissection

Shah J.P.

Memorial Sloan-Kettering Cancer Center, New York, USA.

Presentation type – Plenary session

The significance of metastatic disease in the lymph nodes of the neck as a critical independent prognostic factor in head and neck cancer has long been appreciated. Although 19th century surgeons attempted to remove involved cervical lymph nodes at the time of resection of the primary cancer, a systematic approach to en bloc removal of cervical lymph node disease, described in detail by Jawdyński in 1888 and popularized and illustrated by Crile in the early 20th century, provided consistent and more effective treatment, and forms the basis of our current techniques. During the first half of the 20th century, developments included preservation of the accessory nerve in selected cases, elective neck dissection performed in association with resection of various primary tumors, bilateral neck dissection and limited neck dissection. The greatest impetus to the status of radical neck dissection came from Martin, whose technique consisted of resection of all lymph nodes from level I-V together with the accessory nerve, internal jugular vein, sternocleidomastoid muscle and various other structures in a single block of resected tissue. Martin's technical precepts were followed until the latter part of the 20th century when modifications in technique began to find general acceptance. The first description of an effective technique of modified radical neck dissection was published in Spanish by Suárez, in 1963. This technique, which preserves important structures, such as the internal jugular vein, sternocleidomastoid muscle and accessory nerve, was refined and popularized by various authors who published their results in the English language literature during the period from 1964 through 1990 and beyond. Modified or "functional" neck dissection avoids much of the morbidity of radical neck dissection while achieving equivalent degrees of control of regional disease in properly selected cases. By the late 20th century, the concept of selective neck dissection, consisting of resection of only the nodal groups at greatest risk for metastasis from a given primary site, was studied and developed. These limited dissections are now widely employed for elective, and in properly selected cases, therapeutic treatment and staging of the neck, and have been proposed for limited cervical recurrences after various chemoradiation protocols. Prospective studies have demonstrated similar rates of neck recurrence and survival after elective selective neck dissection compared to elective modified radical neck dissection. Other modifications and factors applied to treatment of cervical lymph node disease include the use of adjuvant and neo-adjuvant radiation and chemotherapy, a revised system for classification of neck dissections, the identification of various adverse prognostic factors such as extracapsular spread and extranodal soft tissue deposits, application of sentinel lymph node biopsy to staging of the

neck, the use of immunohistochemical and molecular techniques for identification of lymph node metastases not detectable by light microscopy, and the possibility of endoscopic neck dissection. The authors conclude that neck dissection, as evolved over the past century, is a fundamental tool in management of patients with head and neck cancer, but is still a work in progress

[HNS 15]

Microsurgical submandibular gland transfer in cases of severe Keratoconjunctivitis sicca

Sieg P.

Dept. of Maxillofacial Surgery, University of Luebeck, Lubeck, Germany.

Presentation type – Plenary session

Microvascular submandibular gland transfer offers a surgical approach to permanent autologous substitution of tears using secretion of the transplanted revascularized denervated gland.
Having used this method for 28 years we are able to present functional long-term results as well as experimental results dealing with the phenomena of transplantation and denervation of salivary glands. 61 submandibular gland transfers were performed in selected cases of severe Keratoconjunctivitis sicca (KCS) within the last 28 years.
In about 3/4 of patients submandibular gland transfer resulted in a longlasting improvement of the clinical symptoms of KCS. This procedure is able to stabilise the clinical findings on the ocular surface and conjunctivae. Questions are still open about regulation of the function of the transferred gland and how to manage the irregular secretion.

[HNS 16]

Impact of the SARS-CoV-2 pandemic on the diagnostic delay of oral carcinoma: a retrospective analysis.

Tomarchio M.A.

Univeristy of Verona - Venice-Mestre Hospital, Verona, Italy.

Presentation type – Symposium

Background. The aim of the present study is to investigate how the organisation of healthcare activity during the first wave of the SARS-CoV-2 pandemic affected the timing of diagnosis of oral carcinoma in the Functional Head and Neck Department of Padua (Italy).
This study gives an effective temporal dimension of the diagnostic delay that oc-

curred during the pandemic, compared with data from the literature.
Methods. A retrospective analysis of the diagnostic path of a patient affected by oral cancer during COVID-19 pandemic was performed. The time elapsed from the patient's awareness of the problem to the first curative surgical intervention was considered both during the blockage of elective care activities and in the period immediately following. The results were compared to a group of patients treated in the same period of the year 2019.
Results. The Territorial Time was 53.9% longer in the Post Lockdown Period than in the Lockdown's one (39,6 days) while the Hospital Time was 56,6% shorter than in the Post Lockdown (56 days)
Conclusions. The response time of territorial medicine has been longer during the pandemic peak. The unintentional creation of exclusive pathways for oncological patients speeded up the diagnostic process. The organisation and accessibility of operating theatres can become particularly problematic during the acute phases of a pandemic.

[HNS 17]

Features of the technique of adenoidectomy for Eustachian tube dysfunction.

Usmanova N.A., Makhkamova N.E.

Tashkent State Dental Institute, Tashkent, Uzbekistan.

Presentation type - Symposium

Background - The Eustachian tube (ET) plays a crucial role in the pathophysiology of the middle ear. Thus, any condition that causes tube dysfunction has a corresponding effect on the pathophysiology of the middle ear, in the form of acute otitis media and otitis media with effusion. Children are more susceptible to middle ear pathology than adults. Almost 40% of children may suffer from Eustachian tube dysfunction in the form of chronic or recurrent otitis media with effusion. ET in children has several differences compared to adults. In children, the tube is generally shorter. This is mainly due to the fact that obstructive dysfunction of the Eustachian tube is a common type among the child population. Surgical interventions for this dysfunction are aimed at partially opening the lumen of the pharyngeal opening of the Eustachian tube. In our study, we focused on the anatomy of the nasopharyngeal space and the technique of adenoidectomy in children.
Aims/Objectives - To study the most effective technique of adenoidectomy with correction of torus tubarius in children.
Methods - The study included children from 3 to 15 years old with grade 2-3 adenoid hypertrophy with chronic and recurrent otitis media with effusion. The operation was performed under endotracheal anesthesia with sevoflurane. Removal of adenoid tissue was performed by a microdebrider under the supervision of a 70 endoscope. Audiometry and tympanometry were performed in patients before surgery and a month after surgery.

Results/Findings - In patients with chronic and recurrent otitis media with effusion, grade 3 adenoids were not always observed intraoperatively, sometimes they were 1-2 grade.
Conclusions - Attention was paid to the size and features of torus tubarius, namely bifurcated torus tubarius or their size entered the nasal cavity through choans, and in some patients' edematous posterior ends of the lower nasal conchs were observed. We performed the gentlest surgical intervention with the correction of the size of the torus tubarius.

[HNS 18]

Head and Neck Oncology: A Real Challenge.

Warraich R.A.

The University of Lahore, Lahore, Pakistan.

Presentation type – Symposium

Oral cancer is among the most prevalent disease globally and has serious health and economic burdens, greatly reducing quality of life for those affected. Treating Head & Neck Oncology is a real challenge to Oral & Maxillofacial Surgeon's as it involves complex tumor resections, neck dissections and reconstruction. The anatomical and functional relevance of the region, the complexity of the defects requiring reconstruction and the potential complications that can occur, represent a true challenge for the surgical team. In our medical field, many of the plastic surgeons have retreated from doing maxillofacial reconstructive procedures because of the nature of complexity of head & neck region, therefore we must create our own skilled workforce so that we can overcome this burden.
Among all the head and neck pathologies including ameloblastomas, osteogenic sarcomas and many other, Oral squamous cell carcinoma (OSCC) is the most common cancer type for oral cavity with a very low survival rate. OSCC is the second highest carcinoma after breast carcinoma in females and bronchogenic carcinoma in males. OSCC of oral cavity is nearly 90% of total head & neck cancers (Weiße J.et al 2020). Various predisposing factors have been investigated that are the root cause of this lethal disease (Johnson JT et al.1981, A khan et al.2023). The International Association of Cancer Registries (IARC), a branch of the World Health Organization (WHO) through the GLOBOCAN project, reports that one-third of all cancer incidences occurs in South Asian nations including India, Pakistan, Bangladesh, Nepal, and Sri Lanka. Counties among those in South Asia, Sri Lanka has the highest rate of oral cancer, followed closely by Pakistan (Rahman et al.2020). In Pakistan, men are disproportionately affected by oral cancer, which is the country's greatest cancer killer. The main risk factors in Pakistani society are the use of tobacco (both chewing and non-chewing), the use of areca nuts and betel leaves, the lack of good dental hygiene practices, the presence of oncogenic viruses, and hereditary factors (Malkani et al.2021).
The effects of oral cancer surgery on quality of life (QoL) and daily functioning are important metrics by which to evaluate treatment success. The assessment of QOL is the main stay in the management of oral cancer before and after surgical procedure.

[HNS 19]

Üz-çənə nahiyəsi hemangiomalarının müalicə taktikasinda müxtəlif növ yanaşmalar.

Yusubov Y.A., Bilalzadeh S.Y., Gurbanaliyeva G.I., Aliyeva M.S.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type – Oral Presentation

Mövzunun aktuallığı: Uşaqlarda üz-çənə nahiyəsi hemangiomaları yumşaq toxuma şişlərinin 67.2 % təşkil edir və başqa nahiyələrlə muqayisədə 80-83 % hallarda sifətdə müşahidə olunur. Çox hallarda bu törəmə ilkin dövrdə üz-çənə nahiyəsində məhdud bir yerdə müşahidə olunur və qısa bir vaxtda böyüyərək qonşu nahiyələrə yayılır. Əksər hallarda xəstələr həkimə gec, artıq şiş böyüyüb yayılandan sonra müraciət edirlər ki , bu da patologiyanın müalicəsinin aktual problem olaraq qalmasına gətirib çıxarır.
İşin məqsədi: Üz-çənə nahiyəsi hemangiomasının yerləşdiyi nahiyədən və formasından asılı olaraq müalicə seçiminin nəticələrinin yüksəldilməsi.
Materiallar və metodlar. Klinikamızda 2015-2022 ci illərdə 200-dən çox uşaqda müxtəlif növ hemangiomaların müalicəsi aparılıb. Bir qrup xəstələrdə yalnız sklerozlaşdırıcı müalicə, digər qrup pasientlərdə sklerozlaşdırıcı və cərrahi müalicə, üçüncü qrupda yalnız cərrahi müalicə aparılıb. Sklerozlaşdırıcı müalicə zamanı tərəfimizdən işlənilmiş "sıxıcı qurğu" istifadə edilmişdir.
Nəticə. Birinci qrup 100 xəstədə törəmə burunun ucunda, qulaq seyvanında, göz qapaqlarında məhdud formada sklerozlaşdırıcı müalicə (Aethoxysklerol 1 %) aparılıb. Bu yolla 98% hallarda xəstələrdə törəmə tam müalicə olunub, estetik, funksional cəhətdən yüksək nəticələr alınıb.
Ikinci qrup 25 xəstədə törəmə yayılmış kavernoz formada olmuş və sklerozlaşdırıcı müalicə "sıxıcı qurğu"dan istifadə etməklə aparılıb. Qurğunun hesabına sklerozlaşdırıcı müalicənin nəticəsi çox yüksək olub və sonra aparılan cərrahi əməliyyatlar zamanı qanaxma riski olmadan 95% hallarda yüksək effektiv müalicə nəticəsi alınmışdır.
Üçüncü qrup xəstələrdə şişin yerləşdiyi nahiyəni nəzərə alaraq yalnız cərrahi müalicə aparılıb. Bütün xəstələrdə estetik və funksional cəhətdən yaxşı nəticələr əldə edilib.
Yekun. Üz-çənə nahiyəsi hemangiomalarının müalicəsində və onların ağırlaşmalarının profilaktikasında ən vacib faktor törəmənin ilkin aşkar olunduğu vaxtdan müalicəsini aparmaq lazımdır. Şişin yerləşdiyi nahiyədən onun formasından asılı olaraq müalicə növünün secilməsi effektiv nəticələr əldə etməyə imkan verir.

Orthognathic surgery [OrS]

[OrS 01]

Smile first concept for 3-dimensional orthognathic surgery planning.

Akdeniz B.S.

Universty of Health Sciences Gulhane Faculty of Medical Dentistry, Department of Orthodontics, Istambul, Türkiye.

Presentation type – Symposium

Background - The success of orhognathic surgery depends on both the surgical technique and the accuracy of surgical plan. Digital three-dimensional (3D) surgical planning techniques were successfully used for over a decade. Although there are various analysis used for surgical planning, most of these analysis were initially constructed for two-dimensional sagittal measurements on lateral cephalograms and most of these analysis are complicated and can only be done with special software programmes which are costly and difficult to use.
Aims/Objectives - Smile characteristics are the main reason for patients to consult for orthognathic surgery but very few analysis were based on the smile of the patients rather than sagittal evaluation. Smile esthetics can be effected by sagittal as well as vertical movements thus it is important to evaluate the possible effects of planned surgical movements on smile characteristics.
Methods - Photography and videography are the most reliable tools when evaluating the spontaneous smile. There is no current analysis which use these tools in a detailed analysis for orthognathic surgery planning. This study reports a simplified evaluation method based on patient's smile characteristics. Initial evaluation was done on detailed facial photographs. Photographic technique and measurement methods with basic digital tools will be discussed.
Results/Findings - Sample analysis, obtained results and the photo-set which was used for smile evaluation will be shown.
Conclusions - Three-dimensional orthognathic surgery planning can be based on smile esthetics of the patients with the use of facial photographs and videography.

[OrS 02]

Tricks in Orthognathic Surgery.

Alkan A.

Proimtech Inc. Istanbul, Türkiye.

Presentation type – plenary session

Orthognathic surgery is a surgical method that treat congenital or acquired deformities or related with mismatch of maxilla, mandibula and dentoalveolar segments which are facial skeletal elements. With this method, it is aimed to correct dentofacial deformities. Orthognathic surgery may perform esthetical purpose or for correcting chewing and temporomandibular joint dysfunctions or correcting speaking and breathing difficulties as well. Since it is a highly invasive surgical procedure, the tricks of orthognathic surgery will be explained in this presentation to prevent or manage possible complications during and after surgery.

[OrS 03]

The Efficacy of the Partial Glossectomy in Orthognathic Surgery.

Altiparmak N., Akdeniz S., Kaya B.

Baskent University Department of Oral and Maxillofacial Surgery, Ankara, Türkiye.

Presentation type – Symposium

Background - The position and volume of the tongue are considered important elements influencing the biomechanics and morphological characteristics of the dentition. Macroglossia is a general term describing the tongue that protrudes beyond the teeth in the natural resting position. Macroglossia can lead to dentomusculoskeletal deformities such as open bite and mandibular prognathism, cause instability after orthodontic and orthognathic surgical treatment. At the same time, a very large tongue may cause interference with physiological functions such as breathing, mastication, swallowing, and phonation. The most commonly reported treatment for macroglossia is glossectomy, which is the surgical reduction of tongue volume.
Aims/Objectives - The aim of this study is to emphasize the importance of evaluating macroglossia (enlarged tongue) prior to orthognathic surgical procedures and shed light on the relationship between glossectomy surgeries and relapse. These topics can contribute to our understanding of the role of the tongue in the preparation process for orthognathic surgery and the long-term outcomes of glossectomy surgeries. It is hoped that this study will provide further insights in this field and contribute to clinical practices
Methods - Eight patients who underwent glossectomy due to macroglossia as a result of orthodontic consultation in the Department of Oral and Maxillofacial Surgery

of Baskent University between 2017-2022 were included in the study. Respiratory differences, taste differences and speech changes of the patients in the postoperative period were evaluated with questions asked to the patients. Overjet, overbite values and presence of orthodontic relapse were evaluated by using preop-postop cephalometric radiographs and clinical examination
Results/Findings - Glossectomy operations performed with the keyhole technique in non-syndromic patients were found to be effective in preventing orthodontic relapse in all patients. Clinically; No long-term complications were observed in breathing, speech and feeding.
Conclusions - Despite the rarity of this procedure, it can be life altering. Improvements in airway, feeding, speech, and psychosocial well-being are the desired outcomes of this procedure. In our 5-year case series, we have found it to be a relatively effective procedure

[OrS 04]

Facial aesthetic proportions resoration.

Andreishchev A.R.

First state Saint-Peterburg medical university, St. Petersburg, Russia,

Presentation type – Symposium

Background - Aesthetic is the main goal for the patients with facial anomalies and deformations.
Aims/Objectives - There are four main aspects: Symmetry Proportions Volume Contouring
Methods - We use traditional orthognathic surgery techniques and bone contour plasty (reduction, osteotomy, implants).
Results/Findings - Step-by-step approach for treatment planning and surgical and stomatological rehabilitation is in basis of treatment protocol. It's effective and give us chance for rheabilitation patients in a best way.
Conclusions - Friendly cooperation between OMF and plastic surgery methods works and follow us to high aesthetic and functional results.

[OrS 05]

Importance of malar projection in skeletal class III dentofacial deformities.

Atac M.S.

Gazi University, Ankara, Türkiye.

Presentation type – plenary session

The congenital skeletal class III deformities may be related but not limited to discrepancies of dental arches, jaws, facial bones. The treatment modalities for skeletal class III dentofasiyal deformities often focuses on the dental alignment and correction of upper and lower jaws' dentoalveolar relation. The commonly used osteotomy for upper jaw and midface for correction of dentofacial deformity is regular Le Fort I maxillary osteotomy (in addition with mandibular osteotomies). Via this approach generally an adequate result may be obtained for the teeth and jaws even on the nasal tip but the deformity around the malar region remains insufficient. In this presentation the evaluation of lack of malar region projection in skeletal class III maxillary and midface deformities will be highlighted and skeletal surgical techniques will be compared and analyzed.

[OrS 06]

Orthognathic Surgery for the management of Obstructive Sleep Apnea.

Cansiz E.

Istanbul University, Faculty Of Medicine, Department Of OMFS, Istanbul, Türkiye.

Presentation type – plenary session

Obstructive sleep apnea (OSA) is a widespread and increasingly common disorder that has received much more attention by the patients and the healthcare professionals recently. The clinical significance of OSA results from hypoxemia episodes caused by collapse of the airway, which leads to apnea or hypopnea during sleep. Although, there are many surgical methods described for the treatment of airway obstruction, orthognatic surgery is the one of the most effective surgical intervention for the management of OSA. In this presentation current consepts, especially bimaxillary advancement surgery techniques, used for the treatment of OSA patients will be describes.

[OrS 07]

Does Subspinal Le Fort I Osteotomy Affect the Nasal Airway Volume? A Prospective Study

Çelebi S., Asan C.Y., Demirbaş A.E.

Department of Oral Maxillofacial Surgery, Erciyes University Dentistry Faculty, Kayseri, Turkey.

Presentation type - Symposium

Background - Since the description of Le Fort fractures, maxillary osteotomies are used to correct dentofacial deformities. After Le Fort I osteotomy, nasal soft tissues are changed as well as nasal airway.The Subspinal Le Fort I osteotomy (SLFIO) is described to prevent undesirable soft tissue changes.In the literature, many articles have reported the effectiveness of SLFIO in preventing nasal deformation.
Aims/Objectives - This study sought to compare the effectiveness of SLFIO and Conventional Le Fort I osteotomy(CLFIO) on hard tissue without any additional modification such as ANS reduction, alar cinch or V-Y closure.
Methods - A prospective study was designed, and two groups were evaluated; group I (22 patients who underwent SLFIO); group II (25 patients who underwent CLFIO). The preoperative and postoperative data of the septum deviation angle and nasal airway volume were examined,there was no statistically significant difference between and within the groups. In group II a negative and statistically significant correlation was observed between the amount of maxillary impaction and the NOSE value (rho = 0.396, p
Results/Findings - In the literature, there hasn't been no objective or subjective evaluation of changes in the nasal tissues related to the SLFIO, such as airway changes and septum deviation. This is the first study to compare changes in airway volume and septal deviation between SLFIO and CLFIO. In this study, in which septum deviation and nasal airway volume were evaluated, no statistically significant difference was found between the two groups.
Conclusions - SLFIO that can be used safely, it doesn't affect the nasal airway negatively

[OrS 08]

ERAS Protocol in Orthognathic Surgery.

Demirbaş A.E.

Department of Oral & Maxillofacial Surgery at the University of Erciyes, Kayseri, Turkey

Presentation type – Symposium

The enhanced recovery after surgery (ERAS) evidence-based protocol is a multimodal perioperative care pathway designed to achieve early recovery for patients undergoing major surgery. The ERAS pathway includes three important components preoperative, intraoperative, and postoperative. The application of the ERAS protocols has a significant improvement of patients' satisfaction, reduction of complications and the overall cost of care in comparison to standard protocols of care. Despite ERAS protocols in several surgical subdisciplines are well introduced, it represents a relatively new paradigm in maxillofacial surgery and there are few data to guide the application of ERAS concept to orthognathic surgery. In this presentation, the concept of ERAS protocol for orthognathic surgery will be explained, and the components of the protocol will be discussed in the light of the literature.

[OrS 09]

Features of using MARPE to achieve successful palatial expansion of maxilla.

Dyugay G.

MiCo Dental Center, Moscow, Russia.

Presentation type – Symposium

Maxillary transverse deficiency is common in orthodontic patients, and it can create clinical, esthetic, and functional problems that affect both the arches. The most common finding in maxillary transverse deficiency is unilateral or bilateral crossbite. According to an epidemiologic study, around 21 % of children have some form of skeleton discrepancy involving both dental arches, with the figure for adult orthodontic patients being less than 10 %. The cause of maxillary constriction is multifactorial as it can be caused by genetic and functional factors. The correction of this problem can be associated with advantageous therapeutic effects on hearing, swallowing, and nasal breathing. These problems can be corrected by various appliances and treatment protocols, which usually include maxillary expansion and separation of the mid-palatal suture. This includes Rapid Palatal Expansion (RPE), Micro-implant Assisted Rapid Palatal Expansion (MARPE), and Surgically Assisted Rapid Palatal Expansion (SARPE).

Rapid palatal expansion (RPE) can cause significant periodontal consequences, especially in adolescents and adults. Using MARPE helps to achieve parallel opening of the mid-palatal suture and avoid excessive buccal inclinations of the supporting teeth.
More parallel expansion is favorable for patients because it improves stability and increases the amount of expansion in the posterior region of the maxilla where expansion is often necessary and difficult to achieve. Bicortical mini-implant anchorage results in improved mini-implant stability, decreased miniimplant deformation and fracture, more parallel expansion in the coronal plane, and increased expansion in bone-borne palatal expansion.
Combination skeletally expands with face mask found that upward and forward rotation of the maxilla occurred with maxillary protraction, and a significantly positive change in the patient's facial profile.
SARPE is considered as the standard procedure to correct the narrow maxilla width in adult patients.

[OrS 10]

Orthognathic surgery performed at the maxillofacial department of the Osh interregional united clinical hospital.

Eshiev A.M., Eshiev D.A.

Osh Interregional Joint Clinical Hospital, Osh, Kyrgyz Republic.

Presentation type – Symposium

In Kyrgyzstan facial anomalies occupies 39.0%, with frequency 111.7 ± 0.6 per 1000 examined. From all - teeth developmental -51.8%, teeth shape - 43.4%. Maxillo-facial disorders occupies 53.0%. Therefore, orthodontic treatment and orthognatic surgery is relevant.
The aim of study is to increase the effectiveness of the treatment of patients with dental anomalies using innovative methods of planning orthodontic and surgical treatment.
Materials and methods: surgical treatment performed on 104 patients (72 women and 32 men) with orthognatic anomalies, divided into groups: 40 patients only on the lower jaw, 40 patients only on the upper jaw, 24 patients on both jaws.
Results: Mandible ramus Retromolar sagittal osteotomy of with complete detachment of the muscles around the branch performed in 40 patients. It provides the most acceptable results of treatment of lower progenia. The method creates the possibility of sufficiently free movement of osteotomized fragments, does not cause TMJ disorders. As bone segments moving creates a large area of wound surfaces contact, the blood supply of osteotomized fragments not disrupted. Surgical treatment of maxillary underdevelopment in 40 patients carried out by two methods. On first - carried out anterior Maxillary fragmentary osteotomy. Such a volume of intervention used only if the sagittal gap between the patient's dentition did not exceed 0.5 cm, and the dental arch of the lower jaw aligned and did not require any correction. If the sagittal gap is more than 0.5 cm, then the operation performed according to the method of G.I.

Semenchenko. Thus, the above clinical observation fully reflects the general results of using the technique developed by us, which gave an effective result in the treatment of dental anomalies. In 24 patients, simultaneous osteotomy performed on the lower and upper jaw. No complications observed in all the examined patients

[OrS 11]

New Paradigms or Old Principles: Current Concepts in Orthognathic Surgery

Galie M.

St. Anna University Hospital of Ferrara - Italy, Department of Cranio Maxillo Facial Surgery - Center for Orbital Pathology & Surgery, Ferrara, Italy.

Presentation type – plenary session

Orthognathic surgery is the science dealing with the cause and treatment of malposition of the bones of the jaws and it has gone from a simple surgical technique to a very sophisticated specialty at the present time.
Since Hugo Obwegeser in 1953 introduced the sagittal split mandibular osteotomy, the evolution of this discipline has been dramatic and significant innovative advances have been reported both in diagnosis and operative techniques with new standards in thinking, planning, anesthesia and intensive care, technology and orthodonthics.
After the introduction of distraction osteogenesis the evolution of the treatment approaches has been remarkable with new trends in preoperative and postoperative orthodonthics and new concepts in planning and timing: surgical–orthodontic for craniofacial anomalies, non-orthodontic orthognathic surgery, non-surgical orthodontic treatment, "surgery first, early, last, late, only, never" and surgical treatment during growth (even in newborns).
Surgical treatment traditionally requires pre-operative and post-operative treatment. Surgical orthodontic for craniofacial anomalies as become a sub-specialty "per se", with patients sometimes inelegible for the orthodontic treatment. The introduction of new anchorage devices in orthodontics maximizes the orthopaedic correction and the sequencing and the temporal context between orthodontics and surgery have a great debate about today.
The concepts of osteotomies and orthognathic surgery are the basis and the very essence of cranio-maxillo-facial-surgery, and the emergenge of "surgery first", the emerging standard of virtual surgical planning and soft-tissue considerations should be discussed and highlighted
Knowledge of the basic surgical techniques for repositioning the jaws is essential for the choice of the correct procedure depending on the specific deformity and key success factors are a wide surgical experience as well as the patient evaluation and planning with a full embracing of the new technologies.
Going back to the history and the old surgical principles is essential as the knowledge of the past helps us to understand the present, anticipate the future and avoid mistakes.

[OrS 12]

Changes in Body Mass Index (BMI) Following Orthognathic Surgery.

Gasimov N., Bilge S., Dogruel F., Demirbas A.E.

Erciyes University, Kayseri, Turkiye.

Presentation type - Oral presentation

Background - Orthognathic surgery is a treatment method in the field of dentistry where orthodontics and maxillofacial surgery collaborate to improve both functionality (chewing, speaking) and aesthetic appearance in patients with severe jaw skeletal deformities.
Aims/Objectives - The aim of our study is to evaluate weight and BMI changes in patients after orthognathic surgery.
Methods - Sixty patients who underwent orthognathic surgery at the Department of Oral, Dental, and Maxillofacial Surgery, Erciyes University Faculty of Dentistry, were included in the study. The weight and BMI of the patients were measured using the TANITA RD-545 device before surgery (Month 0) and at 1 month, 3 months, and 6 months after surgery.
Results/Findings - Out of 60 patients, 42 were female (70%), and 18 were male (30%). The mean age for female patients was 23.5±6, and for males, it was 23±5.5. The average weight of female patients before surgery was 59.1±9.9 kg, and for males, it was 70.3±13 kg. The BMI of the patients was 22.1±3.5. When evaluated compared to Month 0, weight and BMI changes at 1 month, 3 months, and 6 months were found to be statistically significantly lower (p
Conclusions - Insufficient nutrition can occur after orthognathic surgery due to factors that affect both the surgical area and postoperative patient comfort (pain, nausea). Therefore, it is recommended to prepare nutritional programs to ensure the postoperative recovery and adequate and balanced nutrition of planned surgery patients.

[OrS 13]

Surgically assisted rapid maxillary expansion: retrospective analysis of complications 2015-2023

Katashev M., Berro F., Klipa I., Drobyshev A.

MSMU, Moscow, Russia.

Presentation type - Oral presentation

Background - Surgical expansion of the upper jaw is successfully used in patients with congenital jaw anomalies after completion of craniofacial growth. Currently, surgical expansion of the upper jaw is a routine operation and is one of the stages of prepar-

ing the patient for orthognathic surgery. This study proposes a variant of the Le Fort I osteotomy of the upper jaw and mid-palatal suture, along with a simultaneous osteotomy in the area of the zygomaticomaxillary suture, to achieve uniform expansion of the upper dental arch in the anterior and posterior regions.
Aims/Objectives - Improvement of the treatment methodology for adult patients with upper jaw narrowing and underdevelopment using the distraction method.
Methods - Retrospective and prospective studies were conducted on a group of 50 patients aged 18 to 50 years. All patients underwent Cone Beam Computed Tomography (CBCT) of the maxillofacial region (T0) before, (T1) after, and (T2) six months following surgical expansion. To assess changes in the transverse dimensions of the upper dental arch, patient's dental arches were scanned before treatment and after completion of distraction. The patients were divided into two groups: Group 1 (25 patients): Patients who underwent surgical expansion of the upper jaw with pterygomaxillary osteotomy (osteotomy in the area of the zygomatic buttress of the maxilla). Group 2 (25 patients): Patients who underwent surgical expansion of the upper jaw without pterygomaxillary osteotomy (osteotomy in the area of the zygomatic buttress of the maxilla).
Results/Findings - When performing Le Fort I osteotomy and mid-palatal suture in combination with pterygomaxillary osteotomy and the use of a palatal distractor, the expansion in the distal (posterior) and mesial (anterior) segments occurs more evenly compared to cases without this osteotomy.
Conclusions - Consequently, this allows for a more uniform surgical expansion in the anterior and posterior regions of the upper jaw.

[OrS 14]

Investigation of perioperative effects of different hypotensive anesthesia techniques in orthognathic surgery.

Kazimli I., Asan C.Y., Canpolat D.G., Demirbas A.E.

Erciyes University, Kayseri, Turkiye.

Presentation type - Oral presentation

Background - Orthognathic surgery is among major surgeries where hypotensive anesthesia is preferred. Various agents are used for hypotensive anesthesia in orthognathic surgery.
Aims/Objectives - The aim of this study is to investigate the effectiveness of combinations of sevoflurane + remifentanil, esmolol, and nitroglycerin as hypotensive anesthesia methods and to determine the ideal hypotensive anesthesia method for use in orthognathic surgery.
Methods - Patients undergoing orthognathic surgery due to skeletal malocclusion were included in the study. Patients were randomly divided into three groups based on the agents used during anesthesia. Group 1: Sevoflurane and Remifentanil, Group 2: Sevoflurane and Esmolol, Group 3: Sevoflurane and Nitroglycerin. During the perioperative period, measurements were taken for bleeding volume, heart rate, systolic, diastolic, and mean arterial blood pressure. Measurement times included stages of

increased stress levels in the body, such as incision and osteotomy. Blood pressure, analgesic consumption, and pain levels were recorded in the postoperative period.
Results/Findings - There was no significant difference between groups in terms of bleeding volume, surgery satisfaction related to bleeding, and total operation time. Intraoperatively, Group 3 had a higher heart rate compared to the other two groups ($p=0.001$). Similar results were obtained in terms of perioperative hemodynamic stability between Group 1 and Group 2. In the postoperative period, there was no statistically significant difference in analgesic consumption, pain levels, and blood pressure dynamics ($p>0.05$).
Conclusions - For hypotensive anesthesia in orthognathic surgery, all three agents can be safely used. However, in terms of perioperative blood pressure control and hemodynamic stability, remifentanil and esmolol are more effective.

[OrS 15]

Retrospective evaluation of pterigomaxillary separation patterns in Le Fort I osteotomy.

Mammadov T., Demirbas A.E., Kaba Y.N., Bilge S., Soylu E., Yilmaz C., Topan C., Alkan A.

Erciyes University, Faculty of Dentistry, Department of Oral and Maxillofacial surgery, Kayseri, Turkey.

Presentation type - Oral presentation

Background - In the literature, very serious complications associated with pterygomaxillary separation have been reported and complications have been reported to occur due to the use of osteotome. In addition, previous studies have reported that the morphology of the pterygomaxillary region has an effect on pterygomaxillary separation. In this study, the data of 220 patients who had a Le Fort 1 osteotomy and pterygomaxillary detachment was performed with a curved Obwegeser osteotome, who met the study criteria, were evaluated retrospectively and a total of 440 pterygomaxillary separations were examined by dividing the maxilla into two as right and left. According to the results of the study; The most common pterygomaxillary separation was Type III on 196 sides, Type IV (130 sides), Type II (76 sides), and Type I (38 sides), respectively. There was no statistically significant difference between right and left pterygomaxillary separation patterns.
Aims/Objectives - Purpose: Very serious complications associated with the use of an osteotome during pterygomaxillary separation (PMS) have been reported. In addition, there are studies showing that the morphology of the pterygomaxillary region is also effective on PMS. The aim of this study is to evaluate retrospectively the PMS performed using osteotome in Le Fort I osteotomy and to investigate the effect of pterygomaxillary anatomy on PMS types.
Methods - Materials and Methods: This study was performed on 220 patients who underwent Le Fort I osteotomy and PMS was performed using a curved osteotome and met the study criteria. Pterygomaxillary regions were divided into two as right and left, and a total of 440 PMS were examined. The patients were categorized in terms of age,

sex, and type of anomaly, and anatomical measurements were made on preoperative CBCT data, and PMS types were evaluated on the CBCT data obtained within the 1st month.

[OrS 16]

Mandibular stability in class II anterior openbite patients with temporomandibular disorders, treated with bimaxillary counterclockwise rotation and arthrocentesis.

Martinez A.

UVA Clinic, Monterrey, Mexico.

Presentation type – plenary session

Objective: This paper studies occlusal stability following surgical orthodontic correction of Class II anterior open bite patients with concurrent temporomandibular joint pathology.
Materials and Methods. The longitudinal, retrospective study included 27 Class II anterior open bite patients with TMJ internal derangement and often arthrosis documented with MRI, cone beam CT, and clinical examinations. Four months before orthodontic preparation, all patients underwent initial treatment with PRGF (Endoret. BTI Implant Co) arthrocentesis, Mago occlusal splints, and TMJ medical management. Before surgery, the patients underwent stable orthodontic preparation for orthognathic surgery. After orthodontic preparation, occlusal adjustment and composite bonding of worn teeth were accomplished to maximize occlusal fit in the operating room. 3D treatment planning was performed using NemoFAB software (Nemotec Madrid, Spain). Surgery included bimaxillary surgery, counterclockwise rotation of the occlusal planes (CCW), large mandibular advancements, and bilateral TMJ infusions containing plasma-rich growth factors (PGRF).
The patients were evaluated at four-time points: pre-surgical (PreSurg), immediate postoperative (IPost), at six months (6MPost), and 12 months (12MPost) post-surgery. To assess profile stability, cephalometrics variables were measured at all time points. ANOVA test for repeated measures and post hoc Bonferroni ($p < 0.05$) were used to identify differences in the variables' means between treatment times.
Results. The mean mandibular advancement was 19.47 +/- 4.59 mm at Pogonion. All cephalometric variables were statistically significant from PreSurg to IPost ($p < 0.05$). The three maxillary landmarks demonstrated no statistical differences between IPost and 12MPost ($p > 0.05$). Variables SNB, facial angle, ANB, convexity, occlusal planes, overbite, and overjet revealed no statistical differences between IPost, 6MPost, and 12MPost ($p > 0.05$). Importantly, B point and Pg exhibited no differences between 6MPost and 12MPost ($p > 0.05$), indicating stable TMJ morphology.
Conclusions. CCW bimaxillary surgery in class II anterior open-bite patients with pre-existing TMD pathology was stable when treated with arthrocentesis containing PRGF, medical TMJ management, and non-compressive condylar seating in the operating room (OR).

[OrS 17]

Experience with distraction osteogenesis in patients with malocclusion complicated by transversal anomalies. Analysis of complications.

Melikov E., Drobyshev A., Klipa I., Golomazdin P.

Moscow State University of Medicine and Dentistry named after A.I. Evdokimov, Moscow, Russia

Presentation type - Symposium

Background - Nowadays the number of adult patients with malocclusion complicated by transversal anomalies, requiring in complex orthodontic and surgical rehabilitations are still very high. More stable, aesthetically satisfactory result, and early restoration of function can be achieved with surgically assisted rapid maxillary expansion, as one of the stages of a multidisciplinary approach.
Aims/Objectives - SARME/SARPE with distraction osteogenesis has become quite a routine operation as one of the stages of orthodontic treatment of patients with malocclusion complicated by transversal anomalies. Also, this type of operation is used as a preparation of patients for orthognathic surgery, in aim to avoid segmental osteotomy and obtain a stable result. However, do not forget about the complications arising from these operations.
Methods - We have been conducting this type of operation at our department since 2006. The analysis of complications was based on 100 patients from 2019 to 2023. Operation planning was carried individually. Computer software and distraction devices were used during treatment.
Results/Findings - After our analysis of complications, it was revealed that the most common complication in SARPE was the displacement of the distraction vector (65%), due to the displacement of the device itself. The next most common complication was unpredictable unidirectional expansion of the maxilla (25%). And finally, the most rare but more complex complication was postoperative cleft palate at the stage of device activation (10%).
Conclusions - All complications were eliminated in the late postoperative period. Their systematization will help preventively reduce the percentage of their occurrence and solve them in the early postoperative period.

[OrS 18]

Acromegaly as a cause of malocclusion. Systematization and treatment algorithm.

Melikov E., Drobyshev A., Khasanov A., Dzeranova I., Grigoriev A., Bogdanova O.

Moscow State University of Medicine and Dentistry named after A.I. Evdokimov, Moscow, Russia.

Presentation type - Symposium

Background - As known, the formation of the anatomy of the dentoalveolar system, like any other, is influenced by various factors. One of these factors that change the anatomy of organs and body systems at any stage of life is growth hormone produced by the cells of the anterior pituitary gland.
Aims/Objectives - Acromegaly is an neuroendocrine disease that leads to hypertrophy of all body tissues due to exposure to excessive growth hormone production. Facial changes includes deformity, increasing the volume of bone of the superciliary arches, maloclussion due to the lengthening both ramus of the mandible, nose enlargement (hypertrophy of the cartilages).
Methods - The study was conducted at the National Research Center for Endocrinology and at the Department of Maxillofacial and Plastic Surgery of the Moscow State Medical and Dental University named after A.I. Evdokimov. 100 patients were at different stages of surgical and endocrinologic treatment of acromegaly with correction of STH and IGF-1 levels. The study included 20 patients (10 men and 10 women). Patients underwent general clinical, X-ray methods of examination. MRI of the brain + MRI of the temporomandibular joint. Maintaining a photo protocol of patients. Laboratory examination of the hormonal status of patients, filling out a questionnaire of the quality of life.
Results/Findings - All studied patients were found to have malocclusion, mainly due to an increase in the size of the mandible. Patients were noted to have internal TMJ abnormalities according to MRI findings. The mean SNA angle was 81 degrees, which can be considered normal, and the mean SNB angle was 87 degrees, while the normal was about 77 degrees. Changes in the configuration of the face were characterized by massive hypertrophy of subcutaneous fat, increasing of the volume of the lower lip and the nose lengthening, due to hypertrophy of the septal cartilage.
Conclusions - Based on our analysis of modern literature, some authors describe dentoalveolar anomalies in patients with acromegaly, but there is no clear systematization. This work is aimed at creating a descriptive characteristic in order to optimize the algorithm for the diagnosis, treatment and long-term rehabilitation of patients with acromegaly.

[OrS 19]

Surgical features in class II patients to improve aesthetic and functional outcome.

Sviridov E., Drobyshev A., Sorokina M., Toniya D., Izotov O.

FSBEI HE A.I. Yevdokimov MSMSU MOH Moscow, Russia.

Presentation type - Symposium

Background - Class II patients surgical treatment is one of the most challenging types of orthognathic surgery. Different approach in surgical planning for different types of class II malocclusions is required. Facial features of class II patients according to growth type (horizontal or vertical) make treatment plan significantly different.
Aims/Objectives - Improvement of diagnostics and treatment of patients with class II malocclusion.
Methods - We analysed data of 100 patients with class II before orthognathic surgery. All the patients underwent CT-scan and 3-dimention face scan. All the data was analysed with Dolphin Imaging software. Basing on facial features of patient we divided patients for three groups according to facial growth type.
Results/Findings - Basing on study data we've found significant difference in facial features, cephalometric and aesthetic conditions in different facial growth types patients with class II.
Conclusions - Patients with class II require different types of orthognathic surgery depending on facial aesthetics and facial growth type

[OrS 20]

Pitfalls and Challenges in the Management of Maxillomandibular Asymmetry

Tuz H.

Hacettepe University, Department of Oral and Maxillofacial Surgery, Ankara, Turkiye.

Presentation Type – Plenary Session

To a certain degree, asymmetry of the maxillomandibular structures may make a face unique, whereas it can get disturbing as the intensity of the asymmetry increase. The magnitude and acceptability of the asymmetry depend on the location and the degree, and the patient's perception of disproportion. Orthognathic surgical corrections are the primary choice of procedure to establish a proper maxillomandibular alignment. Individuals with facial asymmetry commonly need surgical correction of the jaws to establish facial harmony with better phonation and occlusal functions. Beyond the desired and aimed changes, the impact on maxillomandibular structures

also affects the biomechanics of the TMJ and the condyle.
Surgical correction of mandibular asymmetry comes with challenges that need to be addressed in order to achieve successful outcomes. A proper selection and assessment of patients for surgical correction is also a significant issue in diagnosis and treatment planning other than the location of the asymmetry, occlusion and abnormal growth of the condyle. Moreover, achieving a less invasive surgical approach is another challenge that needs to be considered. This can involve techniques such as inferior border osteotomy or genioplasty, which aim to minimise the extent of surgical intervention while still correcting the asymmetry. The aim of this presentation is to cover these challenges and discuss possible methods in the management of surgical correction.

Craniofacial/Cleft lip and palate [CLP]

[CLP 01]

Features of "Shedule of diseases" items using at the medical examination of conscripts.

Aliquliyev V.K., Aliyeva M.S., Mamedova A.M.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type - Oral presentation

The priority of recruiting the country's Armed Forces is healthy recruitment. During medical examination of conscripts correct interpretation of provisions "Shedule of diseases" (Sh.D.), approved by Decree of the Cabinet of Ministers of Azerbaijan Republic from 28 february 2008, is directly related to the possibility of young men serving at the army without restrictions.

The purpose of the study - optimization of the work of medical commissions of the Civil Service for conscription.
Materials of studies – 432 conscripts checked-up passed the examination at maxilla-facial department of Clinical Medical Center (Baku).
The objective of research - explanations for the application of items 10, 54, 55, 56 and 80 (Sh.d.) during medical examination of conscripts
Results. Among 432 of examined restrictions were indicated two groups with edentulous and bite pathology. The group of conscripts with edentulous (117) is examined by 54 group with bite pathology (200) on item of (Sh.d.). Items are related to diseases of the digestive system. Diseases of dental hard tissues are included to the 55 items, however dental caries is reflected at the 54 item. At the 54 item of indicated document are not given explanations by degrees of dysfunction in connection with causing main disease. By the doctors'commission of 117 conscripts with edentulous were examined without indicating of chewing dysfunction, 200 conscripts with bite pathology with degree indication. 56 people were with cleft lips and palate and conditions after cheilo- and uranoplasty. They were examined not on 56, but 80 item of (Sh.d.), including congenital developmental anomalies. The degree of chewing dysfunction, but several of them speech function without degree was determined. The last group of conscripts from 59 people were relate to "other pathologies" category and examined on 54,55 and 56 items, in several cases on 10 item, concerning benign formations. In this group, no dysfunction of chewing, swallowing, breathing and speech was noted.
Conclusions. During the examination of conscripts with dental diseases (item 54,55 and 56) there is a need to apply other articles of (Sh.d.) (item10, 80). According to the results of the examination of 432 conscripts, there were not noted the cases of appeal.

[CLP 02]

My philosophy on surgical treatment of cleft lip.

Aliyev M.

The Military-Medical Department of the State Security Service of Azerbaijan Republic, Baku, Azerbaijan.

Presentation type – symposium

Background - 70 ilə yaxın yaşı olan Millardın rotasyon-irəlilətmə üsulu, maksillofasial nahiyyənin anadangəlmə inkişaf qüsurları arasında ən sıx görülən dodaq yarıqlarının cərrahi müalicəsində müasir dövrdə də əksər plastik cərrahların tərcihi olaraq qalır. Bu illər ərzində üsulun bir neçə modifikasiyası təsvir olunmuşdur. Cleft lip-nose cərrahiyyəsi isə dodaq rekonstruksiyası ilə yanaşı ciddi bir burun rekonstruksiyası ehtiyacı göstərir. Burada təsvir edilən, primer yarıq dodaq cərrahiyyəsində istifadə olunabiləcək modifikasiya olunmuş bir üsuldur. Son 2,5 il ərzində tərəfimdən əməliyyat olunan, yarığın ağırlıq dərəcəsinə görə grade 2, 3 və 4 olan 52 təktərəfli dodaq yarıqlı körpə müşahidə edildi və bunların heç birində ikinci cərrahi müdaxiləyə ehtiyac duyulmadan qənaətbəxş nəticələr alındı.
Aims/Objectives - Bu çalışmanın məqsədi scroll ligamentlərin kəsilərək sərbəstləşdirilməsi ilə dodaq yarığı cərrahiyyəsində daha qəbul edilə bilən burun şəkilləndirməsidir.
Methods - Əməliyyat olunan körpələr 11 həftə - 18 aylıq idilər. 10"lar qanununa uyan bütün körpələr 11-ci həftədə əməliyyata götürüldülər. Klassik Millardın Mohler modifikasiyasına uyğun çizimlərə ələvə olaraq interkartilaginoz xətt işarələndi. Dodaq rekonstruksiyası Mohler modifikasiyası kimi aparıldı. Burun rekonstruksiyası üçün əlavə interkartilagenoz kəsiklə Scroll ligamentlər səbəstləşdirildi. Burun orta xətti Millard üsulunda olduğu kimi sərbəstləşdirildi. Lakin yarıq tərəfin diseksiyası klassik üsullardan fərqli olaraq apardığımız əlavə kəsikdən çox rahat aparıldı. Əməliyyatın sonunda interkartilaginoz kəsik 6/0 vicryl rapide ile 1 və ya 2 ədəd tikişlə qapadıldı.
Results/Findings - Şəxsi qənaətimə görə klassik üsullardan fərqli olaraq daha rahat və güvənli disseksiya ilə mobil bir burun əldə etdim. Ayrıca, Scroll ligamentlərin kəsilməsi ilə burun elevasiyasının daha rahat olduğunu məntiqli görürəm.
Conclusions - Yekun olaraq, Skroll ligamentlərin kəsilməsi ilə bu üsulun Millardın Mohler mofikasiyasının bir əlavəsi olaraq qəbul oluna biləcəyinin qənaətindəyəm.

[CLP 03]

Our experience with difficult syndromes correction.

Andreishchev A.R, [Chebotarev S.Y], Gorban V.V, Rudoman S.O, Mishustina J.V

St. Petersburg first state medical university, St. Petersburg, Russia.

Presentation type – Plenary session

Background - Congenital facial deformation is an actual problem in dentistry and OMFS. This type patients rheabilitation needs long type, some stager, multidisciplinary approach, high price.
Aims/Objectives - They need dynamic observation from new-born. At adult period they have long medical history. And local status can be different, depends on effectiveness treatment in period of grow. It's extremely difficult and diverse cases. It need individual approache in each cases
Methods - We perform 120-150 orthognathic surgeries each year since 2005. It's complex treatment: surgery, orthodontic, orthopedic, restorative dentistry.
Results/Findings - We discuss the most difficult cases in our practice: syndrome Cruzone, Binder syndrome, otocraniostenosis, hemimandibular hipertrophy, hemimandibular hypoplasy.
Conclusions - This types of anomalies usually needs full face restoration. Increase list of surgeries, operation time, trauma is main surgical factor. It follows us to high level requirements for orthodontic/orthopedic preparation and post op follow-up.

[CLP 04]

Evaluation of the stability of maxillary distraction osteogenesis in adult patients with cleft lip and palate.

Bagaev A.B., Klipa I.A., Drobyshev A.Y.

Moscow State University of Medicine and Dentistry, Moscow, Russia

Presentation type - Oral presentation

Background - Maxillary hypoplasia is the most common deformity of the facial skeleton in patients with congenital cleft lip and palate. Distraction osteogenesis has become an alternative treatment option to traditional orthognathic surgery for maxillary advancement.
Aims/Objectives - Analysis of the maxillary advancement stability using intraoral distraction devices.
Methods - 20 Patients included in the study met the following criteria: age 18 years and older, unilateral or bilateral complete or incomplete cleft lip and palate, reverse incisal overlap, skeletal class III, required maxillary advancement of 9 mm or more. The mean follow-up period was 6 months, from the day the distractors were placed

to the day they were removed. Sagittal changes in the position of the maxilla relative to the anterior skull base (SNA angle) and relative to the mandible (ANB angle) were assessed.
Results/Findings - In 19 out of 20 patients, positive occlusal and aesthetic results were achieved. One patient with a bilateral cleft lip and palate had an almost complete recurrence, which the authors attribute to an excessively pronounced cicatricial deformity of the upper lip and palate after previous interventions.
Conclusions - The distraction method for the treatment of maxillary hypoplasia in patients with congenital cleft lip and palate using intraoral bone distraction devices is a more stable alternative to traditional orthognathic surgery. Therefore, using of this method is recommended.

[CLP 05]

Evaluation of the stability of maxillary distraction osteogenesis in adult patients with cleft lip and palate.

Bagaev B., Klipa I.A., Drobyshev A.Y.

Moscow State University of Medicine and Dentistry, Moscow, Russia.

Presentation type - Symposium

Background - Maxillary hypoplasia is the most common deformity of the facial skeleton in patients with congenital cleft lip and palate. Distraction osteogenesis has become an alternative treatment option to traditional orthognathic surgery for maxillary advancement.
Aims/Objectives - Analysis of the maxillary advancement stability using intraoral distraction devices.
Methods - 20 Patients included in the study met the following criteria: age 18 years and older, unilateral or bilateral complete or incomplete cleft lip and palate, reverse incisal overlap, skeletal class III, required maxillary advancement of 9 mm or more. The mean follow-up period was 6 months, from the day the distractors were placed to the day they were removed. Sagittal changes in the position of the maxilla relative to the anterior skull base (SNA angle) and relative to the mandible (ANB angle) were assessed.
Results/Findings - In 19 out of 20 patients, positive occlusal and aesthetic results were achieved. One patient with a bilateral cleft lip and palate had an almost complete recurrence, which the authors attribute to an excessively pronounced cicatricial deformity of the upper lip and palate after previous interventions.
Conclusions - The distraction method for the treatment of maxillary hypoplasia in patients with congenital cleft lip and palate using intraoral bone distraction devices is a more stable alternative to traditional orthognathic surgery. Therefore, using of this method is recommended.

[CLP 06]

Calvarial reconstruction with frontal & superior orbital rim moulding.

Balaji S.M.

Balaji Dental and Craniofacial Hospital, Chennai, India.

Presentation type – Plenary session

Calvarial reconstruction with frontal and superior orbital rim moulding is a surgical technique that plays a crucial role in correcting cranial deformities. This procedure is particularly significant in the treatment of conditions that affect the shape and structure of the skull, leading to aesthetic and functional challenges. This spectrum of surgeries involves the use of resorbable plates, which are preferred due to the growing nature of the cranium, in children and adolescents and rigid in adults. These resorbable plates in children aid in the expansion of the cranial space, thereby improving the overall facial appearance, especially around the eyes. The procedure is intricate and requires a high level of expertise and precision to ensure successful outcomes. Despite its significant benefits, this surgical technique is often overlooked in settings with limited resources. This is primarily due to the complexity of the procedure and the need for specialized surgical skills and equipment. However, with advancements in medical technology and surgical techniques, it is becoming increasingly accessible. The optimal timing for this surgery is a topic of ongoing debate among medical professionals. However, based on our experiences at an Indian private, tertiary referral centre, we have found that the aesthetic and functional outcomes are most favourable when the surgery is performed between 10 to 12 months of age. Our findings suggest that early intervention with calvarial reconstruction and frontal and superior orbital rim moulding may be an effective approach to managing cranial deformities. At my center, I use a customized approach using 4 piece remodelling with advancement, as it provides best results with metopic stenosis, notably for trigonocephaly condition. This not only improves the patient's quality of life but also contributes to their psychological well-being. I present my 30 + years of experience in this domain using cases from my archives and explain the intricacies.

[CLP 07]

Management of Orbital dystopia.

Balaji S.M.

Balaji Dental and Craniofacial Hospital, Chennai, India.

Presentation type – symposium

There are many causes for the defect of the bony orbit. It could be due to fractures of any cause, post tumor/cyst removal or congenital deformities. In any case, the defect may be unilateral or bilateral and very rare along the midline. In any situation,

a considerable sum of orbital bone mass may be missing or defective in size. Additional impairments such as those of ears, loss of adjacent structures or uncoordinated growth (if in children) may impede the treatment goals. It is not uncommon to find associated disorders of nervous structures such as mengiocele or other neural defects also in developmental causes. In non-trauma cases, very rarely associated cranial bones such as frontal bones may also be involved. Needless to say, if hypertelorism also is a part or resultant deformity, that should also be corrected. The final step would be to correct any abnormal slants.
In any case, the goal would be to save the eyeball, if there is functional capacity. The next step would be to close the defects as much as possible to obliterate the defect functionally as well as anatomically. This would help to evolve proper feeding, swallowing, speech, prevent repeated nasal/sinus infections etc., Next stage would be reconstruction of the associated soft tissue defects. If involving nasal cavity, late rhinoplasty may be required to complete the nasal defect. The timing of the surgery needs to be extremely customized.
The presentation will take through the 26 years of experience in orbital dystopia correction from simple trauma related defects and missing orbital bones to complex, multiple Tessier's orofacial clefting. Appropriate example from the author's surgical experience will help to draw meaningful algorithm to plan and surgically treat the patients.

[CLP 08]

Mandibular distraction osteogenesis in newborns with Pierre Robin Syndrome.

Benlidayı E.

Çukurova University Faculty of Dentistry, Department of Oral and Maxillofacial Surgery, Adana, Turkiye.

Presentation type – symposium

Upper airway obstruction secondary to micrognathia in pediatric patients was first described by Pierre Robin. The findings as micrognathia, glossoptosis, and in some patients cleft palate are referred to as Pierre Robin Sequence (PRS).
Micrognathia can cause upper airway obstruction due to posterior tongue collapse and physical obstruction of the oropharyngeal and hypopharyngeal regions. Affected patients may present with airway obstruction causing impairment to breathing, growth, neurocognitive development and, in advanced cases, life-threatening airway stenosis.
Although the majority of babies born with PRS can be treated with conservative management, some patients may have significant respiratory issues, necessitating more aggressive interventions. Traditionally, tracheostomy has been the most effective and definitive treatment option for these patients. Tracheostomy, however, is associated with frequent morbidity, high cost, and occasional mortality.
Distraction osteogenesis (DO) of the mandible is a relatively new treatment option in

infants with PRS. With this method, the posterior tongue root position is corrected by gradually lengthening the mandible, thereby eliminating the airway obstruction. The mandibular DO method is a useful treatment option for avoiding tracheostomy, as well as improving the vital functions of the baby's airway and feeding function.
In this lecture, the treatment of pediatric patients with PRS by means of mandibular lengthening using external distraction devices will be presented.

[CLP 09]

A retrospective evaluation of demographic and clinical features of alveolar cleft repair in patients with cleft lip and palate.

Fattahov A., Demirbaş A.E, Soylu E., Kaba Y.N, Alkan A.

Erciyes University Faculty of Dentistry Department of Oral and Maxillofacial Surgery, Kayseri, Turkiye.

Presentation type - Oral presentation

Background - Different surgical approaches can be used in the treatment of alveolar clefts in cleft lip and palate (CLP) according to the clinical picture of each patient. Despite the different approaches, the basic principle is to provide bony continuity between the alveolar segments and closure of the oronasal relationship.
Aims/Objectives - The aim of this study was to retrospectively evaluate the demographic data and the distribution of treatment techniques in patients with alveolar clefts.
Methods - The records of 200 patients with DDH admitted to Erciyes University Department of Oral and Maxillofacial Surgery were retrospectively analyzed. The files of patients with alveolar clefts were retrospectively analyzed for demographic data, surgical complication rate, whether graft material was used and which type of graft material was used. The data were then compared using analysis of variance.
Results/Findings - Eighty patients who underwent alveolar cleft repair were included in the study. The mean patient age was 14.8 years.59 patients had unilateral and 21 patients had bilateral alveolar cleft.53 patients had alveolar cleft repair with graft.27 patients had alveolar cleft repair without graft.28 patients had alveolar bone cleft repair with anterior iliac graft.10 patients underwent reoperation.
Conclusions - It is generally accepted that bone grafting is the best way to provide continuity of the cleft segments in accordance with the anatomy of the alveolar cleft. Anterior iliac crest corticocancellous bone graft is considered the gold standard for alveolar cleft repair. In our study, the reoperation rate was found to be lower in patients who underwent alveolar cleft repair using iliac.

[CLP 10]

Orthognathic surgery or Maxillary distraction osteogenesis for patients with cleft lip and palate.

Fedotov R., Topolnitskiy O., Shuba M., Zangieva O., Epifanov S., Yakovlev S.

Moscow State University of Medicine and Dentistry named after A.I. Evdokimova, Moscow, Russia.

Presentation type - Oral presentation

Background - It is an important aspect to all the patients with cleft pathology to undergo subsequent treatment in special medical centers for complex rehabilitation, with the full range of medical professionals, however according to several international and our institute's researches - from 10 to 30 percent of cleft patients need supplementary orthognatic surgery.
Aims/Objectives - To improve the quality of rehabilitation of patients with cleft by orthognathic surgical treatment as well as by applying a distraction method for moving the upper jaw forward.
Methods - Patients were divided into 2 groups: Group 1 - patients with cleft who underwent orthognathic surgery with simultaneous moving of the jaws to the correct ratio at the age of 16 to 25 years. Included 148 patients with full cleft lip, alveolar bone and cleft palate received treatment and orthognathic surgery, 69% percent have a unilateral cleft and 71% percent have a bilateral cleft. Depending on the character of the deformation andbone tissue, defect, the the orthognathic surgery was performed for the upper jaw, lower jaw and bimaxillary. Upper jaw osteotomy was performed among 26% of patients, lower jaw osteotomy was performed among 4% patients and bimaxillary osteotomy was performed among 70% patients. Group 2 - patients who were treated with the distraction method at the age of 15-22 years. (Maxillary distraction). Included 33 patients. 60% of them with bilateral cleft and 40% with unilateral cleft. Distraction was performed on the 7th day after the surgery moving for 0.5 mm per day (activation of the distractor was performed twice a day moving for 0.25 mm at a time). The average time of the retentive period was 20 weeks. The shortest period of consolidation - 14 weeks applied for the patient with an external device.
Results/Findings - Group 1: Stable result of occlusion after orthognatic surgery was achieved for 79% cases. Relapse was noted in 21%. A reliable correlation between relapse and quality of postoperative orthodontic treatment (p
Conclusions - In carrying out orthognathic surgical treatment in a number of cases it is possible to carry out one-stage bone grafting of the cleft, which reduces the stages and terms of surgical treatment of patients, which is impossible with the application of the distraction method. Taking into account our personal experience and colleagues' experience, we consider that the application of the distraction method gives a more stable occlusion result than the use of orthognathic surgical treatment with simultaneous movement of the jaws, however, after using the distraction method, additional surgical treatment is required to extract the distraction device. The optimal rate of distraction for the upper jaw is 0.5 mm per day and the consolidation period for a good stable result is at least 20 weeks.

[CLP 11]

Pediatric craniofacial surgery. A view from Moscow.

Golovanev P.S., Asadov R.N.

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Presentation type - Symposium

Introduction. Among the wide variety of congenital malformations and acquired deformities of the craniofacial region, pediatric craniofacial surgeons, as a rule, are engaged in surgical treatment of children with non-syndromic and syndromic forms of craniosynostoses, front-nasal dysplasia, anterior encephalocele. Despite the successes achieved, craniofacial surgeons around the world are trying to improve both functional and cosmetic treatment results. This paper presents the experience of a Moscow children's institution specializing in surgical care for children with craniofacial pathology.
Research Aims. Improvement of cosmetic results of treatment of children with congenital craniofacial malformations.
Methods. For more than 20 years, more than 1,500 patients with a wide variety of craniofacial malformations have been surgically treated in our center. Among non-syndromic craniosynostoses, scaphocephaly (sagittal synostosis), trigonocephaly (metopic synostosis), plagiocephaly (hemicoronar synostosis) and brachycephaly (bicoronar synostosis) are more common in our practice. Less often, craniosynostoses occur as part of various craniofacial dysostoses (Apert syndrome, Crouzon syndrome, Pfeiffer syndrome) - syndromic craniosynostoses. Successful experience in the treatment of children with anterior encephalocele has been accumulated. Operations are performed by a joint team of surgeons including both a neurosurgeon and a plastic surgeon. Almost the entire arsenal of craniofacial reconstruction methods is used, including minimally invasive interventions, circular orbitotomies, distraction methods of treatment, etc. Fixation of the skull bones is carried out with both titanium and resorbable fixing material.
Results. We always pay special attention to the cosmetic results of treatment. In our opinion, the treatment results of our group can be assessed as excellent and good. Most parents are satisfied with the changes in the appearance of their children.
Conclusions. As a result of many years of work, it was possible to develop an algorithm for surgical treatment of patients with various craniofacial pathology. The improved methods of surgical treatment used helped significantly improve the cosmetic results of treatment of children with congenital craniofacial malformations

[CLP 12]

Moscow Cleft Treatment Protocol.

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Presentation type - Symposium

The modern treatment conceptions require the functional approach during all stages of treatment. Different teams from all over the world present different strategies. The functional approach demands radical surgical steps to restore functional anatomy of the zones involved in malformation. We start treatment by primary cheilorhinoseptovestibuloplasty at the age of 3-6 months. Postsurgical rehabilitation includes special anatomical nostril retainers wearing and massage. Good function usually gives good aesthetics. Next step – palatoplasty at the age of 12-16 months (own technique). This technique combines intravelar veloplasty principles with unilateral preservation of the uvula and very appropriate functional and esthetic results. The modern preservation technique elements must be integrated in this procedure. The palatoplasty is one of the most important and potentially dangerous procedures in cleft rehabilitation protocol.
The functional approach requires functional therapy as well. After the primary surgery orthodontic therapy follows to normalize the maxillary shape and prevent secondary deformation. Speech therapy is also necessary to help to restore normal speech before school.
We continue surgery of the age of 7 years by alveolar bone grafting with combined autoxenotransplant. The approach we use permits us to achieve up to 91% of good results after bone grafting. After these three steps are completed we can quietly go to the necessary secondary surgeries following the indications – orthognathic surgery, rhinoplasty, pharyngoplasty completing the rehabilitation before the 16 years of age. Successful treatment requires very qualified specialists at every stage. Team work and treatment consistency are the key to avoiding complications. Our protocol gives the unified way for all types of clefts which is important in specialists' education and understanding of therapeutic possibilities.
The social adaptation is not a "gold standard" of successful treatment anymore. We have the possibilities to achieve really perfect results in the majority of cases with good function and perfect esthetics.

[CLP 13]

Is it possible to achieve the perfect nose shape after primary cheilorhinoplasty in cleft lip and palate patients?

Ivanov A.L., Anashkina D.Y.

National Medical Research Centre for Dental and Maxillofacial Surgery of the Ministry of Health of Russia, Moscow, Russia.

Presentation type – symposium

Objectives: achieving a good nose shape is a challenge in cleft lip and palate surgery. The aim of this study was to improve the technique of primary cheilorhinoseptoplasty and analyze the optimal amount of surgical interventions for improving long-term outcomes.
Materials and methods: The main group in patients (n = 20; from 3 to 15 months of age) with unilateral cleft lip and palate (UCL) who were operated by functional primary cheilorhinoseptoplasty and used of anatomically shaped nostril retainers 6 months after investigation. The control group in patients (n = 10), which were operated by another different techniques without using of nostril retainers. 3D photogrammetry was done before and after operation. Aesthetic results were assessed using special
scale of upper lip and nose symmetry based on anthropometric ratios (V degrees of severity).
Results: The best aesthetic results were achieved after the most radical surgical approach following the functional principle (correction of the lip, nose, septum, and vestibulum) compared to other methods. The secondary corrective surgery was still necessary for the majority of patients. The use of nostril retainers allowed to reduce the amount of surgical secondary correction. Patients from control group required major reconstructive surgery. The secondary deformations like nostril stenosis, alar flattening, septum deviation can be fixed at the age of 3-5 years with nonfunctional technique.
Conclusion: Based on the results of this study, the perfect stable anatomy is still not achievable in the majority of cases of UCL. Due to growth scarring and secondary deformations, several stages could be necessary to get good aesthetic and functional outcomes. The use of nostril retainers has significantly improved the overall nostril and alar anatomy after the UCL surgical treatment.

[CLP 14]

Autotransplantation of the lower premolar with simultaneous bone grafting of the alveolar process as a way to restore the dentition in patients with congenital clefts of the upper lip, alveolar process and palate.

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Moscow Regional Scientific Research Clinical Institute named after M. F. Vladimirsky, Moscow, Russia.

Background: In patients with congenital cleft lip and palate, there is a defect and deformation of the alveolar process, often combined with primary adentia, leading to a violation of the bite, the relationship of the teeth, dental arches and deformation of the upper jaw. This causes speech impairment, functional disorders of the gastro-intestinal tract, disturbance of appearance, and aggravates the psycho-emotional state of the child and his parents. Restoring the integrity of the upper jaw and upper dentition is possible using dental prosthetics or dental implantation. All these methods have age restrictions and, in the case of dental implantation, are possible after several operations.
Objective: Increasing the effectiveness of treatment of children with congenital cleft lip and palate through bone grafting with simultaneous autologous transplantation of a permanent tooth.
Materials and methods: The Department of Maxillofacial Surgery operated on 26 patients with cleft lip and palate. The operation is bone grafting of the alveolar process with simultaneous autotransplantation of the tooth.
The age of the patients ranged from 9 to 12 years. Of the 26 patients: 25 had a unilateral cleft combined with congenital edentia of the maxillary lateral incisor, 1 patient had a unilateral cleft of the alveolar process of the maxilla with congenital edentia of both maxillary lateral incisors.
Autogenous bone chips combined with xenogeneic granulated bone material were used as a bone plastic material during the operation.
Results: After 6 months After surgery, in 20 cases, the formation of bone regenerate in the cleft area was noted, stabilization of the autotransplanted tooth and the absence of root resorption were also noted. In 2 cases, the sutures separated, followed by tooth extraction and partial resorption of the graft. 1 case - gum recession, eruption of a miniplate with subsequent partial loss of osteoplastic material, which became an indication for removal of an autotransplanted tooth. 2 cases - suture dehiscence followed by tooth extraction and complete resorption of the graft.
Conclusion: In patients with congenital clefts of the upper lip, alveolar process and palate in combination with tooth adentia in the cleft area at the age of 8-11 years, the use of autologous tooth transplantation with simultaneous bone grafting of the alveolar process of the upper jaw to restore the upper dental arch can be considered as a method of restoring the dentition.

[CLP 15]

Cleft surgery and dysgnathia surgery.

Nagy K.

Semmelweis University Budapest/Catholic University of Louvain, Budapest, Hungary.

Presentation type - Symposium

Facial clefts are the most common facial malformations. The frequency of cleft lip and palate is 0.5-2‰. The treatment of affected children is a multidisciplinary process that lasts for years. For this reason, high-quality care can only be provided in designated centers. Knowledge of the latest trends in surgical techniques is essential for specialists. The sequence of surgical and non-surgical treatments is well known and accepted, but individual judgment is always required. The order of the interventions is as follows: closure of the lips, the soft palate, the hard palate, ear- nose-throat care, speech therapy, finally orthodontic treatment.
Face and jaw bone deformities (dysgnathia) can be grouped and classified in various ways. These deformities are caused by dental anomalies (Angle class I-III, crossbite, open bite, laterognathia), the relationship of the jawbones to each other (mandibular prognathia or retrognathia, maxillary protrusio or retrusio), and the physiognomy of the entire face (long-face, short -face, bird-face deformity). The goal of modern facial surgery is not only to resolve the dental anomaly, but also to restore a harmonious, ideal facial shape. When restoring the dental arches, the symmetry and aesthetics of the entire face are inevitably changed, which must be taken into account when planning the surgeries. There are typical forms of deformities, which can be grouped. Based on this, the treatment plans can also be standardized. This enables a deformity-specific surgical sequence, providing both functionally and esthetically appropriate results. Full clinical and radiological documentation, cephalometric analysis and virtual surgery are required for all patients. The detailed planning process is very diverse and based not only on the literature, but also on the clinical experience of surgeons.
In this presentation we will provide a full description of our treatment schedule and surgical protocol in cleft and orthognatic care at out Centre of Facial Reconstruction.

[CLP 16]

The characteristics of orbital morphology in patients with craniofacial abnormalities.

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Introduction. Early ossification of cranial sutures could lead to different types of craniosynostoses. One should mark out syndromic and non-syndromic craniosynostoses. Among syndromic specific interest shows management of the patients with Cruzon syndrome in which maldevelopment of upper and middle zones of the face, associating to decreasing of the orbital depth (Od), resulting in exophthalmos are typical pathological changes. Their management requires multidisciplinary team of maxillofacial and plastic surgeons, and ophthalmologists. The gold standard of their surgical treatment is four-wall osteotomy of the orbits, osteotomy of frontal, zygoma and maxillary bone and its single unit advancement (monobloc) by distractor devices. One should note that functional and esthetic outcomes depend on adequate preoperative planning. The aim of the current study was to determine correlation between cephalometric indexes of the orbits and dentoalveolar system in patients with Cruzon syndrome, which could be useful in preoperative planning.
Materials and methods. Current study was performed in department of oral and maxillofacial surgery, Azerbaijan Medical University in period of 2015-2022. Control group included CT scan data of 37 healthy, while main 6 of Cruzon patients who underwent virtual surgeries. Cephalometry and virtual surgery were done by Materialise Mimics, while statistics by MedCalc 20.104 software.
Results. In healthy average: Od 39,73 mm, SNA 82,22, SN 69,08. In Cruzon patients preoperatively average: Od 29,14, SNA 66,86, SN 56,09 and postoperatively: 37,49, 70,48 and 65,67 respectively. In healthy: Od to SNA ratio = 0,48 and Od to SN ratio = 0,66. In Cruzon patents preoperatively Od to SNA ratio = 0,439 and Od to SN ratio = 0,51, postoperatively 0,53 and 0,57 respectively.
Conclusions. The relationship in-between morphological indexes of orbits, dentoalveolar system and anterior cranial base was detected, that determines necessary monobloc advancement distance in reconstructive surgery of Cruzon patients.

[CLP 17]

Orthognathic surgery or Maxillary distraction osteogenesis for patients with cleft lip and palate.

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Moscow State University of Medicine and Dentistry named after A.I. Evdokimova, Moscow, Russia.

Presentation type - Oral presentation

Background - It is an important aspect to all the patients with cleft pathology to undergo subsequent treatment in special medical centers for complex rehabilitation, with the full range of medical professionals, however according to several international and our institute's researches - from 10 to 30 percent of cleft patients need supplementary orthognatic surgery.
Aims/Objectives - To improve the quality of rehabilitation of patients with cleft by orthognathic surgical treatment as well as by applying a distraction method for moving the upper jaw forward.
Methods - Patients were divided into 2 groups: Group 1 - patients with cleft who underwent orthognathic surgery with simultaneous moving of the jaws to the correct ratio at the age of 16 to 25 years. Included 148 patients with full cleft lip, alveolar bone and cleft palate received treatment and orthognathic surgery, 69% percent have a unilateral cleft and 71% percent have a bilateral cleft. Depending on the character of the deformation andbone tissue, defect, the the orthognathic surgery was performed for the upper jaw, lower jaw and bimaxillary. Upper jaw osteotomy was performed among 26% of patients, lower jaw osteotomy was performed among 4% patients and bimaxillary osteotomy was performed among 70% patients. Group 2 - patients who were treated with the distraction method at the age of 15-22 years. (maxillary distraction). Included 33 patients. 60% of them with bilateral cleft and 40% with unilateral cleft. Distraction was performed on the 7th day after the surgery moving for 0.5 mm per day (activation of the distractor was performed twice a day moving for 0.25 mm at a time). The average time of the retentive period was 20 weeks. The shortest period of consolidation - 14 weeks applied for the patient with an external device.
Results/Findings - Group 1: Stable result of occlusion after orthognatic surgery was achieved for 79% cases. Relapse was noted in 21%. A reliable correlation between relapse and quality of postoperative orthodontic treatment (p
Conclusions - In carrying out orthognathic surgical treatment in a number of cases it is possible to carry out one-stage bone grafting of the cleft, which reduces the stages and terms of surgical treatment of patients, which is impossible with the application of the distraction method. Taking into account our personal experience and colleagues' experience, we consider that the application of the distraction method gives a more stable occlusion result than the use of orthognathic surgical treatment with simultaneous movement of the jaws, however, after using the distraction method, additional surgical treatment is required to extract the distraction device. The optimal rate of distraction for the upper jaw is 0.5 mm per day and the consolidation period for a good stable result is at least 20 weeks.

[CLP 18]

Revision Surgery - cleft lip / nose.

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Cleft lip and nose cases may require secondary revisions due to multitude of causes and needs. It should be kept in mind, however that initial primary surgical repair of both lip and nose are important and carried out simultaneously. Proper reconstruction of one element without other would be inadequate. Considerations on when, to what extent and how is a matter of different opinions. Some cases still may request and need secondary revisions. The understanding of underlying deformations and deformities require clear understanding, selection of ensuing techniques and execution of the surgical procedure.

[CLP 19]

Anterior craniofacial resection for tumors of the sinonasal tract and orbit.

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Internal Troops Military Hospital, Baku, Azerbaijan

Presentation type – symposium

Background - The introduction into clinical practice of combined neuro – and rhinosurgical procedures, in particular, anterior craniofacial resection (ACFR), made it possible to ensure the complete removal of all benign tumors of the nasal cavity, paranasal sinuses and eyeball, spreading to the anterior part of the of the skull base and / or in the anterior cranial fossa (ACF), as well as to improve the results of treatment of patients with malignant tumors of these localizations.
Aims/Objectives - Evaluation of the results of ACFR in patients with advanced tumors of the nasal cavity, paranasal sinuses and eyebulb based on clinical data and dynamic observation. We observed 15 patients, 7 of whom had benign, 8 - malignant tumors. Among the patients with benign tumors, 3 – had ossifying fibroma with primary localization of the tumor in the nasal cavity, 2 – had adenoma of the left eyeball, 1 patient was diagnosed ethmoid mucocele, and 1 –had extensively spreading of ethmoid bone fibrous-epithelial polyps. Out of 8 patients with malignant tumors, 7 – had esthesioneuroblastoma and 1 patient had squamous cell carcinoma of the nasal cavity.
Methods - All patients underwent ACFR, which was performed by bifrontal craniotomy and modified lateral rhinotomy. In only one patient with fibrous-epithelial polyps, rhinosurgical procedure was performed by midfacial degloving.
Results/Findings - In all patients with benign tumors, ACFR ensured complete re-

moval of the tumor. In 2 patients with eyeball adenoma, this surgery was combined with extended exenteration of the orbital contents. Out of 8 patients with malignant tumors, in 2 – ACFR was performed in combination with enucleation of only the eyeball. In 5 patients with esthesioneuroblastoma, on average, a recurrence of the tumor occurred after 2.5 years, for which radiation therapy was performed, which had only a palliative effect. As a result of the spread of the tumor to the frontal lobe of the brain, 3 patients died after 4 years, and one patient – 5 years after combined treatment. Four patients lived for 5 years.
Conclusions - ACFR provides complete removal of all benignant tumors, penetrating into the anterior skull base and/or in ACF. This procedure also makes it possible to achieve a 5-year survival rate in 50% of patients with malignant tumors of these anatomical structures.

[CLP 20]

Rare facial clefts - clinical findings and surgical management.

Sieg P.

Dept. of Maxillofacial Surgery, University of Luebeck, Luebeck, Germany.

Objectives: The wide variation of craniofacial clefts, their complexity as well as the rarity of these conditions make classification difficult and require adjusted surgical strategies. Among the different structures involved in the cleft formation the orbit and the cranial base need special consideration as in most of these cases development of encephalomeningoceles results. The aim of this study was to evaluate the short and long term outcome after early and staged surgical treatment.
Patients and Methods: 72 children with rare facial clefts were evaluated according to the extension of their cleft formation and the individual surgical management. Seven out of 72 suffered from a combination of different clefts based on the Tessier classification. In 29 cases the neurocranium was involved in the cleft formation.
Results: Depending on the extension of the cleft formation the surgical management was based on three major requirements:(1): Establishment of normal eye-lid function to preserve visual acuity, (2): Repair of perioral structures to achieve oral competence. (3): Closure of the bony gap to the neurocranium.
The decision management, technical notes as well as dealing with side effects of the surgical treatment and long term results will be presented in detail.
Conclusion: The presentation focuses on the clinical findings, classification and outcome after surgical treatment of rare craniofacial cleft cases. The soft tissue repair mainly aims for improvement of eyelid function and perioral repair to achieve oral competence. The surgical management allowed definitive treatment of the encephalomeningoceles and improvement of function and aesthetics but long term effects due to scar contracture and further growth of the children have to be considered.

[CLP 21]

Azerbaijan facial soft tissue thickness database for craniofacial reconstruction.

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Presentation type – Symposium

Background - Facial soft tissue thickness (FSTT) is essential for plastic surgeons, maxilla-facial surgeons, orthodontists for treatment planning and to forensic anthropologists for facial reconstruction. In spite of this, there is no database of the facial soft tissue thickness of the Azerbaijan population.
Aims/Objectives - The aim of this study was to evaluate the variation in facial soft tissue thickness in Azerbaijan population according to sex, age, body mass index and to establish a database.
Methods - The variability of facial soft tissue thickness (FSTT) was measured at 12 unilateral and 11 bilateral anthropological landmarks on head CT-scans of 150 male and 150 female adult subjects of Azerbaijan population. Age groups: I - 18-25; II - 26-45; III- 46 and more years. CT-scans were mode available after being a part of the diagnostic procedure concerning the paranasal sinuses of the patients. The height and weight of all subjects were determined and their body mass index (BMI) was calculated. A correlation between skinfold thickness and body mass index with that of FSTT was observed. Data of mean, standard deviation, maximum and minimum soft tissue thickness values of the faces individuals were evaluated and differences related to age, sex, and body mass index were calculated. The specificity of new database was evaluated by comparing values with published datasets of various populations.
Results/Findings - Sexual dimorphism was noted, with males having thicker facial soft tissue at all measured points. BMI showed good correlation with FSTT in both males and females, which was confirmed statistically. Differences were observed in thicknesses for Azerbaijan population when compared to other studies.
Conclusions - FSTT is influenced by the age, sex, ethnicity and the body mass index of the individual. The thickness of soft tissue of Azerbaijan population was different from that described in the literature and reported for samples from other countries.

[CLP 22]

Our approach to the rhinocheiloplasty for patients with unilateral secondary cleft lip nose deformities.

Sultanova N.N., Ramazanov E.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type - Oral presentation

Background - Cleft lip and palate is one of the most common congenital deformities of the craniofacial complex. It is usually accompanied by deformity of the nose and growth retardation of the midface. The nose deformity can either be primary or secondary, the first is related to the cleft lip and palate, while the second is related to varying degrees of the recurrence of the deformity and scarring.
Aims/Objectives - of this work is to improve the treatment outcomes of patients with unilateral secondary cleft lip nose deformities.
Methods - Surgical treatment of 12 patients, aged 16 to 34 years, with unilateral secondary cleft lip nose deformities. Impairment of aesthetic facial perception, nasal breathing dysfunction and psycho-emotional discomfort were noted in all patients. The our protocol of surgical procedure consists of: carrying out a transcolumellar asymmetrical incision, subperichondrial plane dissection, partial or total extracorporeal septoplasty, percutaneous lateral and transversal osteotomy, using spreader grafts and flaps for the stabilization of the nasal internal valve. During secondary cheilorhinoplasty, reconstruction of the tip is included: complete detaching of the inferior lateral cartilage from the skin and mucosa; disrupting the abnormal attachment of nasal ligaments; reorientation of the deformed architecture of the cartilaginous part of the nose by using suture algorithm; inserting extension nasal graft, alar rim grafts, onlay graft and diced-cartilage fascia graft for premaxilla augmentation on the cleft side.
Results/Findings - All patients were the followed up 1-18 months in terms of their aesthetic appearance and nasal breathing. The aesthetic and functional outcomes of intervention were found to be very good and good (90 %), satisfactory (10%) in patients.
Conclusions - The described protocol of anthropometric examination and surgical technique can be recommend in the treatment of patients with secondary cleft lip nose deformity.

[CLP 23]

The Treatment of the 'Cleft Lip Nose Deformity' and personal Technique.

Yıldırım I.

Yeditepe University of Istanbul in Cranio-Maxillo-Facial Surgery, Istanbul, Turkiye.

Presentation type – symposium

As it is known, after the surgical treatment of cleft lip and palate one may see post-op deformities on nose, lip and adjacent structures.
Specially Cleft Lip Nose Deformities are big problem for any surgeon and any patient as well. Some authors described new techniques for correcting the nasal deformity. As far as I am concern, any procedure is not enough to satisfy the surgeon, even the patient as well.
After having a wide and practical experience our new technique will give benefit to patients and our colleagues. I presented this original technique and post-op results first time in the World Congress of plastic surgery, in Delhi 1987. Refreshment of this technique step by step getting and getting better. I am going to present late results of some cases

[CLP 24]

Uşaqlarin anadangəlmə dodaq və damaq yariği ilə tibbi-sosial reabilitasiyasi, onlarin həyat keyfiyyəti.

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Background - Anadangəlmə dodaq və damaq yarığı uşaqlarda çox rast gəlinən qüsurdur və bununla bağlı anatomik, funksional pozğunluqlar baş verir. İlk növbədə uşaqlarda qida qəbulu pozulur, ana döşünü sora bilmir. Süni qidalanmanın uşaqlarda təsiri məlumdur. Bu qrup xəstələrdə əng inkişafdan qalır, nitq pozulmuş olur və bunlarla əlaqədar olaraq onların tibbi-sosial reabilitasiyası aktual problem olaraq qalır.
Aims/Objectives - Uşaqlarda anadangəlmə dodaq və damaq yarığının kompleks müalicə tədbirlərinin nəticələrinin yaxşılaşdırmaqdır.
Methods - Bizim tədqiqatda 120 xəstədə 18-35 yaşda uranostafiloplastika əməliyyatından sonra cərrahi, ortodontik və loqopedik tədbirlərin nəticələri araşdırılmışdır. Bunların əsasında bu qrup pasiyentlərdə həyyat keyfiyyəti öyrənilmişdir. Bu məqsədlə xüsusi sorğu vərəqəsi-anket işlənib hazırlanmışdır. Ən çox istifadə olunan sorğu anketi EUROQOL.MOS SF-36 əsasında.
Results/Findings - Sorğu vərəqəsi əsasında 58 nəfərdə (45,2±5,34) nitq kafi olmuşdur, 62 (54,8±5,64) – pasiyentdə nitq pozulmuş vəziyyətdə qalıb. 21,8 % xəstədə ortodontik müalicənin nəticəsi yaxşı olmuşdur. Tam orta məktəb təhsili 56 nəfər alıb. Ali təhsil

olan olmayıb.
Conclusions - Apardığımız araşdırmalar bir daha təsdiq edir ki, bu patologiya ilə bağlı bir çox problem öz həllinin tapmayıb və bu istiqamətdə elmi tədqiqatı təşkilatı işlərin aparılması vacib məsələ olaraq qalır. İlk növbədə bu qrup xəstələrin həyyat keyfiyyətini yüksəltmək üçün cərrahi əməliyyatdan sonra bu uşaqlarla ortodont, loqoped müəyyən müddət müntəzəm olaraq məşğul olmalıdırlar.

Salivary glands disorders [SG]

[SG 01]

Qulaqətrafı ağız suyu vəzin şişlərinin statistik dəyərləndirilməsi

Aliyev J.A., Miskinli R.Z., Iskenderov E.R., Aliyeva A.M., Bashirov S.G., Annagiyev E.F.

Milli Onkologiya Mərkəzi, Bakı, Azərbaycan.

Aktuallığı: Qulaqətrafı ağız suyu vəzin şişləri xoşxassəli və bədxassəli olaraq 2 qrupa bölünür. Ədəbiyyat məlumatlarına görə qulaqətrafı ağız suyu vəzin şişlərinin 80%- i xoşxassəli 20% i isə bədxassəli olur. Ümumdünya Səhiyyə Təşkilatının siniflendirməsinə görə 14 tip xoşxassəli ağız suyu vəzi şişləri vardır. Onlardan ən çox rast gəlinən pleomorf adenoma sayılır. O, bütün ağız suyu vəzilərin benign şişlərinin 75%-ni təşkil edir. Xoşxassəli ağız suyu vəzilərinin şişləri içərisində 2-ci yerdə Warthin tumoru sayılır. O daha çox papiros çəkənlərdə rast gəlinir. Bədxassəli ağız suyu vəzilərin şişləri içərisində Mukopeidermoid karsinoma ən çox rast gəlinən şişdir. Bu şiş gedişatına görə ağız suyu vəzin şişləri işərisində ən aqressiv şiş sayılır. Bütün yaş qrupuna aid olan insanlarda rast gəlinir.[1] Adenoid kistik karsinoma isə ikinci sırada durur. İncə İynə Aspirasion Biopsiyası (İİAB) ağız suyu vəzilərinin şişlərində benign və malign olaraq ayırd etmək mümkün olmadığı üçün tətbiq olunmur. Diaqnostikasında KT müayinəsi şişin lokalizasiyasını öyrənmək üçün ən informativ metod hesab olunur. Cərrahi müalicəsi şişin lokalizasiyasında asılı olaraq fasial sinirin bütün şaxələrinin qorunaraq total və parsial superfasial parotidektomiya cərrahi əməliyyatdan ibarətdir. Törəmə qulaqətrafı ağız suyu vəzin dərin payını da əhatə edibsə fasial sinirə invaziya qeyd olunmursa, fasial sinirin və onun şaxələrinin qorunmasına çalışaraq total parotidektomiya cərrahi əməliyyatı icra olunur. Əgər törəmə qulaqətrafı ağız suyu vəzin səthi payında məhdudlaşırsa o zaman parsial superfasial parotidektomiya cərrahi əməliyyatı icra olunur. Əməliyyatdan öncə boyun limfa düyünlərində pataloji limfa düyünləri qeyd olunarsa boyun limfodisseksiyası cərrahi əməliyyatı da icra olunmalıdır. Sinirə invaziya qeyd olunursa fasial sinir rezeksiya olunur. Bu halda sinirin rekonstuksiyası düşünülə bilər. [2] Parotidektomiya əməliyyatından sonra baş verə biləcək ağırlaşmalara – fasial sinirin rezeksiyası, frey sindromu, yaraya tüpürcək axması, şişin residivi aiddir. Frey sindromu zamanı əməliyyatdan sonra xəstə çeynəyən zaman qulaqətrafı nahiyyədə tərləmə meydana gəlir. Yaraya tüpürcəyin axmasının qarşısını almaq üçün yara mütləq drenaj olunmalıdır. Şişin residivi isə şişin tipindən asılı olaraq dəyişir. [3]
Material və metodlar: Tədqiqata Milli Onkologiya Mərkəzində 2021 ci ildə qulaqətrafı tüpürcək vəzin şişlərinə görə əməliyyat olunan xəstələr cəlb olunmuşdur. 52 xəstəyə parotisin törəməsinə görə cərrahi əməliyyat icra olunmuşdur.Cərrahi əməliyyatdan sonrakı patahistoloji dəyərləndirməyə əsasən 40 xəstədə parotisin xoşxassəli törəməsi, 10 xəstədə parotisin bədxassəli törəməsi, 2 xəstədə isə limfoma qeyd olunmuşdur. 8 (20,00%) xəstədə Warthin tumoru 18 (45,00%) xəstədə isə pleomorf adenoma, 6 (15,00%) xəstədə bazal hüceyrəli adenoma, 4 (10,00%) xəstədə onkositoma qalan 4 (10,00%) xəstədə digər xoşxasəli törəmələr qeyd olunmuşdur. Bədxassəli şişlərdən isə 4 (8%) xəstədə mukoepidermoid karsinoma, 3 (6%) xəstədə Yastıhüceyrəli karsinoma, 3 (6,00%) xəstədə isə adenokarsinoma qeyd olunmuşdur. 1 xəstədə əməliyyatdan əvvəl

törəmə olan nahiyyədə xəstənin üzündə parez əlamətləri qeyd olunmuş, xəstəyə total parotidektomiya icra olunmuş, şişin fasial sinirə invaziyası qeyd olunduğu üçün sinir rezeksiya olunmuşdur.
Nəticə: Tədqiqatın nəticələrinə əsasən 40 xəstədə parotisin xoşxassəli törəməsi 10 xəstədə isə bədxassəli törəməsi qeyd olunmuşdur.Tədqiqatın nəticələrindən əldə etdiyimiz məlumatlara əsasən parotisin xoşxassəli şişləri 80,00% bədxassəli şişləri isə 20,00 % olmuşdur. Ədəbiyyat məlumatlarına görə Mukoepidermal şişlər isə bütün şişlərin 3,50% - 8,50%-ni təşkil edir.[1]Tədqiqatlarımızda isə bu göstərici 6,00% olmuşdur.

[SG 02]

Surgical Strategies in Parotid Gland Tumors: Antegrade and Retrograde Approaches

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Presentation type - Oral presentation

Introduction. Parotidectomy is a surgical method used in the treatment of parotid gland tumors. There are different types, including superficial, subtotal, and total parotidectomy. Considering this, in our study, we used two surgical techniques: antegrade and retrograde.
Objective. The aim of the research is to compare which technique is more effective in benign and malignant tumors, as well as to assess parameters such as postoperative facial nerve paresis, bleeding risk control, and the degree of surgical difficulty.
Material and methods. The study was conducted on 42 patients who underwent surgery for parotid gland neoplasms at our clinic between 2021 and 2023. Among these patients, 20 were operated on using the antegrade technique, and 22 were operated on using the retrograde technique. The study recorded parameters such as the duration of surgery, the benign or malignant nature of the tumor, bleeding control during and after surgery, the patient's recovery process, and facial nerve injury.
Results. Out of the 20 patients who underwent the antegrade technique, 5 developed facial nerve paresis after surgery. signs of paresis in both the eye lid and. In the case of the 22 patients who received the retrograde technique, 6 of them developed paresis after surgery. Due to the larger surgical site in the retrograde technique, there was a higher incidence of bleeding, which extended the patients' recovery period.
Conclusions: As a result, we recommend against the use of the antegrade technique for malignant tumors due to its potential to scatter tumor tissue. Furthermore, in the case of benign tumor treatments, the retrograde technique led to increased bleeding, which resulted in longer surgery durations and extended recovery periods. However, considering the possibility of facial nerve transection and the risk of permanent damage, it should be noted that the antegrade technique carries a higher likelihood of causing facial nerve damage.

[SG 03]

Controversies in the management of pleomorphic adenoma of the salivary glands

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Presentation type – Plenary session

Although pleomorphic adenoma is a benign tumor its behavior mimics that of ameloblastoma, as a simple enucleation of the tumor will lead to a high incidence of multifocal local recurrence. Historically this led to superficial or total parotidectomy being advocated as the treatment of choice for this tumor. However, these operatiopns do remove the bulk of the parotid gland and also can have a relitively high complication rate. Other treatments including extra-capsular dissecxtion and partial parptidectomy have been proposed as being less radical with similar or better recurrebce rates and less morbidity. Conflicting evidence in the literature has caused controversy regarding which surgery is the best for pleomorphic adenoma. This abstract will discuss the evolution of surgical management of pleomorphic adenoma and discuss current concepts of management.

[SG 04]

Variations of the Facial Nerve Surgical Branching Anatomy in Parotid Surgery.

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The relationship of the parotid gland to the facial nerve is of major surgical importance in parotid surgery procedures. The facial nerve may be injured in its extratemporal course as a result of facial trauma and laceration, or iatrogenic trauma during surgery involving the parotid gland, submandibular gland, open access to the temporomandibular joint and during facelift procedure. Anatomical peculiarity of the parotid compartment and evident high percentage of facial nerve (FN) branching variations create the necessity of competent surgical approach. Parotid gland surgically is unilobular gland with numerous processes and no true superficial and deep lobes separated with facial nerve branching. There are three surgical zones regarding the structures. We have analyzed the records and measurements about surgical anatomy variations of facial nerve variations. Additional comparative analyze was made with anatomists on 20 cadaver dissections with accent on facial nerve extraglandular variations until the level of lateral palpebral line. Mean distance from the pointer to the facial nerve trunk and bifurcation was 13 mm, ranging from 12.0 mm and 13.5 mm

respectively. Hypoplastic or hyperplastic main trunk was rarely present. Greatest parts of variations were in upper division of five level branching. On cadaveric cervicofacial dissections marginal mandibular branch was below the mandibular border in half of dissections included. The frequency of peripheral pattern and connections of the facial nerve were type III (32.1%), type I (27.1%), type IV (23.5%), type II (17.3%). In every distinctive type subsequent subtype was included. The conclusions are confirmative that extratemporal facial nerve branching pattern is extremely variable. Well-defined knowledge of the facial nerve extratemporal anatomy and its variations is essential to enable safe dissection through the plane of the face.

[SG 05]

Clinical Experience and Treatment outcomes of benign Tumors of Parotid Gland: A 10-year clinical experience in a Single Center

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Presentation type – Plenary session

Introduction: The objective of this retrospective study was to evaluate the clinical outcomes of patients diagnosed with benign parotid tumors over ten-year period in a single center.
Methods: This retrospective study was undertaken at the Jeroen Bosch Hospital in the Netherlands from 2013-2022. All patients were registered in the hospital data base and permission was granted for this audit for scientific purposes. Data was collected such ages, sex, diagnosis, laterality. Exclusion criteria were: diagnosis of malignant tumors and patients that were lost in follow up.
Results: Over a 10-year period, a total of 264 patients were treated, with 171 (64.7%) diagnosed with Pleomorphic Adenoma, 60 (22.7%) diagnosed with Warthin's tumors, and 33 (12.5%) diagnosed with tumor-like lesions. There were 75 (43,8%) male and 96 (56,1%) females in the pleomorphic adenoma group. Within the male group of pleomorphic adenoma, 44 (58,6%) patients showed a left sided laterality and 31(41,3%) patients showed a right sided laterality. Within the female group of pleomorphic adenoma 57 (59,3%) patients showed a left side laterality and 39 (40,6%) patients showed a right side laterality.
There were 60 patients with a Warthin's Tumor. Within the Warthin's group, 36 (60%) were male and 24 (40%) females. Within the male group of Warthin's tumor 19 (52,7%) patients showed a left side laterality and 17 (47,2%) patients a right side laterality. Within the female group of Warthin's tumor 8 (33,3%) patients showed a left side laterality and 16 (66,6%) patients showed a right side laterality. Frey syndrome was encountered in 1 patient in our study.
Conclusion: Pleomorphic Adenoma was the most common lesion, followed by the Warthin's tumor; other lesions were less common. A female preponderance was seen in the pleomorphic adenoma group. In both females and males, a left side laterality was observed in the majority of the cases. Whereas in the Warthin's group there was

a male preponderance. In terms of facial nerve weakness, the location of the tumor in relation to the facial nerve and nerve stretching were the most significant factors. Tumors located deep in the parotid gland were more likely to cause facial nerve weakness compared to superficial tumors. Additionally, extra capsular dissection resulted in less facial nerve weakness than other forms of parotidectomies.

Digital Technologies in OMFS [DT]

[DT 01]

Virtual surgical planning for oral soft tissue reconstruction with submental island flap.

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Presentation type - Oral presentation

Introduction. Over the past decades, the submental island flap (SİF) has been the most discussed and promising for the reconstruction of soft tissue defects of the oral cavity. This flap is an alternative to a free graft, especially in cases where the use of the latter is not available. In recent years, computed tomography angiography (CTA) has been used to adequately plan reconstruction. CTA followed by virtual 3D reconstruction allows for individualized virtual planning of donor flap design.
Target. To demonstrate the versatility and effectiveness of the submental flap in the reconstruction of soft tissue defects of the oral cavity in cancer patients with the study of the possibilities of using 3D virtual planning using this flap.
Materials and methods. A prospective study was conducted including 20 patients with locally advanced oral tumors who underwent reconstruction of SİF soft tissue defects from 2017 to 2022 and some of them underwent a preoperative diagnostic program, including CTA and the use of data using 3D planning software.
Results. Among 20 patients, there were tongue defects in 6, floor of the mouth in 3, alveolar process of the maxilla and mandible in 4 and 2, respectively, buccal mucosa in 2, retromolar region in 3 patients. The rate of local complications after reconstructive surgery was 40.0% (in 8 out of 20 patients), while total necrosis did not occur in any case. Other complications such as partial flap necrosis were observed in 5.0%, marginal necrosis in 10.0%, and suture failure in 25.0% of patients. Good and satisfactory functional results were obtained in all patients, aesthetic results in 95.0% of patients. The use of 3D planning of reconstructive operations in 7 patients made it possible to achieve a more accurate and predictable assessment of the volume of reconstruction. The duration of the operation has decreased, and the risk of complications has decreased due to a decrease in the number of manipulations. Functional and aesthetic results were improved.
Conclusions. SİF is a successful option for the reconstruction of soft tissue defects of the oral cavity after ablastic operations. 3D surgical planning is an effective tool in reconstructive surgery, allowing to improve surgical results and reduce the risk of complications.

[DT 02]

Computer-assisted technologies in maxillofacial surgery: our experience.

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Presentation type - symposium

Background: The bone corrective surgery in maxillofacial surgery requires high surgical skills and detailed preoperational preparation and planning. The goal of this surgery is not only improvement of function, but also satisfactory aesthetic outcome, which can be unachievable without precise bone fragments positioning. Computer-assisted technologies are widely used for planning and manufacturing of surgical guides and custom implantable devices for correction of jaw anomalies or aesthetic purposes.
Aims/Objectives: The main purpose of this work is to analyze our experience and approaches in computer-assisted surgery for maxillofacial and aesthetic operations.
Methods: Before the treatment planning the patient undergoes the composite 2D/3D protocol. To capture the data a mirror camera with long-focus lens, structered light scanner, dental scanner and conventional MSCT are used. For registration of NHP (Natural Head Position) the 3d and 2d targets are used. The aesthetic golas of treatment are determined during the consultation by the modification of soft tissue surface scan models. The modified surface scans with displacement vectors and lanmarks are projected on the surface of the bones to construct the goal bone surface. Then the virtual osteotomies and positioning of bone fragments or implant design are performed, and the custom surgical guides, plates, implants are manufactured to reach the desired bone framework modification. After the operation the patients undergo control computed tomography scanning and face 3D scanning to assess the surgery result and aesthetic outcome perception.
Results/Findings: Soft tissue modelling as universal visual language helps to explicitly determine the patient's desired appearance and to find a consensus in surgical methods to achieve the required result. Soft tissue modeling helps to reveal the inadequate requirements in facial appearance, usually associated with body dysmorphic disorder, or serve for patient education in acceptance of patient's own appearance before or after surgery. Computer modelling allows to receive more detailed visual information about the anatomical structures to be operated and profitable not only in primary, but also in secondary surgical cases. Thus, the surgeon receives more information about important anatomical structures, asymmetry and disproportions what helps to determine more precise surgical plan. Custom surgical guides allow to avoid damaging of vital anatomical structures (as inferior alveolar nerve or teeth roots) and provide more predictable bone positioning, but the design of guides should be meticulously optimized to limit dissection area, to provide good visualization of surgical field and ease of handling. The predictability of bone fragments positioning lies between 0,5 – 1,5 mm in most cases. Nevertheless, the soft tissue response to changes

of bony framework geometry is still disputable and requires verification in any separate surgical technique.
Conclusions: Soft tissue virtual modelling plays a significant role in patient selection and further compliance with procedure and outcomes. Computer-assisted technologies in maxillofacial surgery allow to achieve predictable surgery results and avoid damage of vital structures during surgery.

[DT 03]

3D - technologies in maxillofacial surgery.

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Presentation type – E-Poster

Background - The use of three-dimensional (3D) technology in facial surgery has ushered in a paradigm shift in medicine. Using sophisticated 3D printing and imaging techniques, surgeons are now able to painstakingly develop surgical strategies, customize implants for patients, and improve surgical precision. These technological advances provide an unprecedented degree of individualization and precision in the treatment of complex craniofacial injuries and malformations.
Aims/Objectives - The purpose of this study is to determine the clinical utility and benefits of using three-dimensional (3D) models for planning and performing surgical interventions in the treatment of midfacial defects and extensive jaw pathologies. In particular, we focus on the use of preoperatively curved reconstruction plates, which have been shown to be effective in improving surgical outcomes and patient satisfaction.
Methods - The method involved a titanium plate being manipulated, shaped and positioned on the defect in a specific way, depending on its characteristics. Before surgery, the plate is properly prepared and sterilized. The operation then carefully accesses the orbit, gently releases the muscles and nerves, and fixes a titanium plate over the defect. Fixation is carried out using specialized microscrews, which are securely fixed along the periphery of the orbit. The complexity of the procedure is explained by the presence of extraocular muscles and optic nerves passing through the orbital cavity.
Results/Findings - As an example of medical progress in the field of maxillofacial surgery occurred in Astana (Kazakhstan), when the vision of two teenagers was successfully restored using modern 3D technologies. The use of three-dimensional (3D) models of patients' cranial structures to reconstruct damaged eye orbits during surgery has become a significant development. This innovative approach demonstrates the profound impact of technological advances in the field of facial surgery. Fortunately, the operations were considered successful, but over the next week the patients were closely monitored by doctors to ensure their recovery proceeded without complications.
Conclusions - In conclusion, the introduction of 3D technology in facial surgery has

ushered in a new era of precision, customization and safety. Patients now have access to more effective treatments, reduced risks and improved aesthetic results. As technology advances, the future opens up even greater possibilities for facial surgery, providing hope for those seeking functional and aesthetic improvements.

[DT 04]

Digital workflow integration onto implant surgery. Advantages of implant crowns prepared CAD/CAM technology.

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Presentation type – symposium

The integration of digital workflow into implant surgery has transformed the precision and efficiency of procedures. The initial phase involves meticulous intraoral scanning and virtual planning, laying the foundation for precise implant placement. This abstract emphasizes the critical role of implant guides in this process, serving as navigational tools during surgery to ensure accurate execution of the virtual plan. The use of implant guides enhances procedural accuracy, reduces the margin for error, and expedites surgical timelines, particularly beneficial in complex cases demanding a meticulous approach.
In the subsequent phase of the digital workflow, Computer-Aided Design and Computer-Aided Manufacturing (CAD/CAM) technology takes center stage in the preparation of implant crowns. The digital design allows for customization based on the virtual model, contributing to enhanced accuracy and streamlined fabrication. This abstract highlights the advantages of CAD/CAM technology in implant crown preparation, emphasizing its role in minimizing manual errors, reducing turnaround time, and promoting cost-effectiveness. The precision afforded by CAD/CAM technology not only ensures optimal prosthetic fit but also contributes to superior aesthetic outcomes, marking a significant advancement in the field of implant dentistry. Together, the integration of implant guides and CAD/CAM technology in the digital workflow offers a comprehensive and transformative approach to implant surgery, promising improved patient outcomes and a more efficient and precise prosthetic restoration process.

[DT 05]

Surgical treatment complications of fully edentulous patients with poor fixation of the surgical guide.

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Presentation type – E-poster

Background - Prevalence of partial edentulism in different age groups of patients is 40-75%. At the same time fully edentulous is detected in 37% of elderly patients. Currently, the dental implants are the most relevant method of rehabilitation of fully and partially edentulous patients.
Aims/Objectives - To assess the accuracy of treatment for edentulous patient with poor fixation of the surgical template.
Methods - In the preoperative period, the patient had passed clinical examination, cone beam computed tomography using the "double scan" technique. Treatment planning and fabrication of mucosa supported surgical template was performed by using 3Shape Implant Studio software (3Shape, Denmark). The surgical guide was fabricated by 3D printing method. According to the manufactured surgical template, 4 dental implants were placed in the edentulous mandible. The patient had passed cone beam computed tomography after surgical treatment. The resultant files were superimposed. The maximum values of axial deviation, apex deviation and the neck of dental implants were performed.
Results/Findings - The following data were obtained when estimating the accuracy of dental implant positioning using the surgical template in the fully edentulous patient: the maximum axial deviation was 8,56±4,32°, the maximum implant neck deviation was 1,02±0,76 mm, the maximum implant apex deviation was 1,57±0,85 mm.
Conclusions - Using of surgical templates allow to increase the accuracy and predictability of the surgical treatment. However, the absence of additional methods of fixation of the surgical guide (pins) in fully edentulous patients may lead to significant displacement of the guide in the oral cavity and increase the risk of possible complications during surgical manipulations.

[DT 06]

Artificial intelligence in dental implantation.

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Nowadays, it is difficult to imagine a more important and promising areafor the application of artificial intelligence than medicine. AI is used for the diagnosis of various diseases, the development of new drugs, and new methods of treatment.
The development of implantology gives impetus to a novel approach to accurate

planning and loading prediction at all stages of treatment, as well as to a search for technologies and tools that reduce the time of surgical and orthopedic treatment to quickly rehabilitate the patient.
Interest in immediate or early loading of the implant is currently sharply increasing [1]. To achieve high stability parameters of the implant in the bone tissue and reduce osseointegration, modified surgical and orthopedic protocols are used [2, 3]:
- subcrestal implant placement;
- implant angulation bypassing important anatomical formations;
- choice of the implant design;
- implant placement in the bone tissue by bicortical technique;
- modifying the working protocol for bone preparation, including its instrumental compaction;
- splinting of provisional prosthetic restoration on implants;
- placement of a customized provisional composite abutment to form a gingival profile;
- intraoperative installation of a removable platform switching base;
- plastic surgery of soft tissues immediately after implant placement.

In everyday practice, depending on the primary stability values, it is possible to decide on immediate, early, or delayed loading of the implant. The lack of mechanical mobility of the implant results in changes in the peri-implant tissues leading to a further process of osseointegration and the natural biological framework around the implant, forming, over time, the final secondary stability.
To decide about the loading, the resonance frequency analysis (RFA) for measuring the implant stability, developed by Meredith, is used, based on the measurement of the resonance of electromagnetic waves.
However, this parameter alone is not always enough; it is necessary to take into account the influence of other factors that have a significant effect on the rate of bone regeneration around the implant, for example, the type of prosthetics, the torque force, the type of fixation of the dental restoration, the type and class of bone resorption, and the screw-in angle of the implant [4].
All of this led us to the idea of combining these parameters into a single patient management scheme based on artificial intelligence, as well as creating a software calculation to determine the timing of orthopedic loading at the surgical phase [5].
The aim of the study is to train an artificial neural network to predict the orthopedic load term on implants using the application software package Statistica Neural Networks, Version 13.
Clinical observations obtained as a result of surgical treatment with the application of dental implants in 64 patients were used.
To process the experimental data, a machine learning method (artificial neural network) was used.
Taking into account the results of the preliminary experiments, we selected the main variables (input parameters) that significantly affect the rate of bone regeneration around the implant. Input parameters and levels of variation: prosthetics type (single, bridge), dynamometric force, N•cm (20 to 45), implant stability quotient (ISQ), measured by PenguinRFA (50 to 75 units), fixation type (standard, bicortical), bone type (hard, dense, soft, loose), resorption class (A to E), screwing angle (straight, angulated).
The response function (output parameter) was the orthopedic load term (days).
Input parameters were assigned numeric values:

- prosthetics type (1 - single, 2 - bridge):
- fixation type (1 - standard, 2 - bicortical);
- bone type (1 - loose, 2 - soft, 3 - dense, 4 - hard);
- resorption class (1 - A, 2 - B, 3 - C, 4 - D, 5 - E);
- screwing angle (1 - straight, 2 - angulated).

By the method of multidimensional statistical analysisusing neural networks of the application software package Statistica Neural Networks, Version 13 a data setwas processed, including the factors affecting the bone integration of dental implants. Clinical observations obtained as a result of surgical treatment with the application of dental implants in 64 patients were used. A neural network was trained to predict the orthopedic load term on implants depending on the values of the selected parameters: prostheticstype, dynamometric force, implant stability quotient, fixation type, bone type, resorption class, and a screwing angle. As a strategy for constructing the models, an automated neural network was chosen: the type is a multilayer perceptron, the minimum number of hidden neurons is 4, and the maximum is 12. The coefficient of determination for the training sample is 0.960141. The activation function of the hidden neurons is identical, of the output onesis logistic. A histogram of the deviations of the input values of the orthopedic load term from the values of the trained network is constructed. The response surfaces of the output parameter (the orthopedic load term) were obtained depending on the pairwise influence of various factors. Ten test data were analyzed. The sum of the squared residuals is minimal and ranges from 0 to 6.021. The trained neural network can be used to predict the orthopedic load term.

The patient undergoes an X-ray and the anatomy of the alveolar ridge is assessed. Using the software interface and the implant library, the virtual positioning of the implant relative to the bone volume is performed. Next, the type of bone tissue in the area of the proposed installation is determined according to the Hounsfield scale (HU). The units of measurement range from -1024 to +1024. This method is based on the degree of absorption of X-rays by anatomical structures.

The consequence of tooth extraction is a decrease in the functional loading of the alveolar process, which leads to a loss of volume and a change in the structure of bone tissue. Having received a section of the alveolar ridge by CBCT in the proposed implantation zone, the degree of resorption was assessed, which depends on the blood supply to a particular section of the jaw, on the presence of the prosthesis, the period of missing teeth, as well as on the gender and age of the patient. The Lekcholm and Zarb classification of bone tissue was taken as the basis [6].

Soft tissues provide nutrition to the periosteum and affect the timing of implant integration; therefore, prior to dental implantation surgery, the volume and condition of the mucosa, as well as the need for soft tissue plastics, are assessed. A thin biotype of the gingival tissue is a risk factor for its survival. The optimal predicable result is achieved with a thick type of keratinized mucosa. The gingival biotype was determined according to Rasperini with colored probes (HU-Friedy COLORVUE BIOTYPE PROBE) submerging them one by one into the gingival sulcus and assessed with transmitted light.

To create a future prosthetic restoration, it is necessary to obtain a digital image of the teeth, which will make it possible to achieve the ideal accuracy of the provisional restoration and accelerate the patient's rehabilitation. With the help of a special optical sensor mounted in the tip of the scanner, an image is created and automatically converted into an open digital STL format, which allows one to work in any orthopedic

modeling program. The process from scanning to imaging takes 30 minutes.
After scanning is completed and the electronic STL file is saved, the Exocad program evaluates and additionally simulates the missing teeth, as well as, if necessary, corrects the shape of the old prosthetic restoration. In the 3Shape program, in which a computed tomography image is preloaded in the Dicom file format, the virtual placement of the implants and the screwing angle relative to the image of the future prosthetic restoration are assessed.
Having received preliminary information about the type of bone tissue, the class of bone resorption, the biotype of the mucous membrane, the angle of screwing of the implant relative to the alveolar ridge, the type of the planned prosthetic restoration, as well as the torque force to achieve the primary implant stability, we will be able to predict the timing of the prosthetic restoration loading from the moment of the implant placement, using an ANN.
After the implant placement, using a torque wrench, the force with which the implant was installed in the bone tissue is finally measured, and the implant stability quotient (ISQ) is determined using a special device.
The ISQ index directly depends on the compressibility and the level of integration of the implant, as well as the bone quality. The inserted Multipeg pin, by a noncontact method, transmits impulse vibrations depending on the density of the contact between the implant and the bone, and the values are output to the device after 1-2 seconds.
The values of the torque force and the ISQ are entered in the ANN program for the final verification of all parameters and making a decision on the timing of the orthopedic loading. After receiving the data within 5 minutes, a decision is made on immediate, early, or delayed loading with the restoration.
Duringthe treatment process, it is possible to use a trained neural network in assessing the orthopedic load term on implants,as well as in decision-making about theimmediate loading with the prosthesison the day of surgery. The use of artificial intelligence at the planning stage makes it possible to predict in advance the period of the patient's temporary rehabilitation.

TMJ disorders [TMJ]

[TMJ 01]

Gicgah-çənə oynağının osteoartrozlarında yeni laborator markerlər.

Ahmedov E.T., Gurbanaliyeva G.I., Jafarov M.A., Guliyev A.H., Aligulieyav V.G.

Ağız və üz-çənə cərrahiyyəsi kafedrası, ATU, Azərbaycan, Bakı.

Giriş. Gicgah-çənə oynağının osteoartrozları müalicəyə davamsızlığına, diaqnostikasının mürəkkəbliyinə və klinikasının çətinliyinə görə digər üz-çənə patologiyalarından fərqlənir. Osteoartrozlar zamanı sürtünmənin, küyün əmələ gəlməsi, çənənin hərəkətlərində məhdudluq, qida qəbulunun pozulması xəstələri çox narahat edir və onların həyat keyfiyyətini pozur. Osteoartrozların diaqnostikasında müxtəlif metodlar istifadə edilir. Klinik və rentgenoloji metodlardan fərqli laborator üsulların öyrənilməsi diaqnostikada əhəmiyyət daşıyır. Təəsüf ki, belə mürəkkəb patologiya zamanı klinikada laborator diaqnostika üsullarına az üstünlük verilir. Bu isə diaqnozun tam dəqiqləşdirilməsində və müalicədə böyük çətinliklər yaradır. Müalicə prosesinin düzgün aparılmaması isə tibbi-sosial problemlərə səbəb olur.
Tədqiqatın məqsədi. Gicgah-çənə oynağının osteoartrozlarında yeni laborator diaqnostik markerlərin öyrənilməsi.
Material və metodlar. Tədqiqatın materialı 60 xəstəni əhatə edəcək. Bütün xəstələrdə qanın ümumi analizi, revmatoloji əhəmiyyətə malik iltihabın aktiv faza göstəriciləri və patoloji seroloji proteinlər – ASL-O, CRZ, RF parametrləri öyrəniləcək.
Xəstələrdə əlavə olaraq yeni laborator diaqnostika metodları tətbiq ediləcək. Oynağın qığırdaq matriksi əsas maddədən əlavə kollagen və elastindən ibarətdir. Destruksiya prosesində rola malik polimorfonuklear elastaza fermentinin aktivliyi dinamik olaraq periferik qanda təhlil ediləcək. PMNE – neytrofil elastaza birləşdirici toxuma strukturlarının və çoxlu bioloji substratların dağıdıcı proseslərinin informativ markeridir. Sümük proseslərində vacib rol oynayan sümük qələvi fosfotaza – BAP və ß-cross laps – BCL osteomarkerləri müalicədən əvvəl və sonra dinamik olaraq tədqiq olunacaq. Bu markerlər patogenetik müalicəni təmin edəcək. Müalicə prosesində biokimyəvi markerlərin dinamikasının öyrənilməsi 4-cü ayın əvvəlinə qədər davam edəcək.
Nəticələr və müzakirə. Gicgah-çənə oynağının osreoartrozlarında yeni laborator diaqnostika metodları işləniləcək. Bu üsulların işlənilməsi diaqnozun tam aydınlaşdırılmasına, müalicənin düzgün aparılmasına və o cümlədən patogenetik əsaslandırılmasına səbəb olacaq. Müalicənin düzgün aparılması isə səmərəli nəticələrin alınmasına gətirib çıxaracaq.
Yekun. Effektiv nəticələrin alınması gicgah-çənə oynağının normal funksional vəziyyətini təmin edəcək. Yeni laborator üsulların kliniki dəyərinin təsdiqi xəstələrin tez sağalmasına və həyat keyfiyyətinin yaxşılaşmasına səbəb olacaqdır.

[TMJ 02]

Strategies For The Surgical Treatment of Mandibular Asymmetry.

Akdeniz S.S.

Baskent Univesity Department of Oral and Maxillofacial Surgery, Ankara, Turkiye.

Presentation type – symposium

Mandibular asymmetry is a severe esthetic and functional discrepancy directly affects the oral health related quality of life. Unilateral variable condylar growth problems can induce different amounts of mandibular asymmetry. Therefore, treatment strategies include initial elimination phase of the condylar lesion and concomitantly correction of the facial harmony.
The aim of this lecture is to describe and discuss variable etiological factors for asymmetric condylar growth. The planning flow for the long-term individual treatment will be presented for one or multiple staged surgical interventions. The advantages, challenges and clinical results of different surgical methods will be discussed.

[TMJ 03]

Temporomandibular Joint Arthrocentesis and Intraarticular Injection Techniques.

Akkor B.B.

Ondokuz Mayıs University Faculty of Dentistry, Samsun, Turkiye.

Presentation type – Plenary session

Temporomandibular disorders (TMD) are the main cause of non-odontogenic orofacial pain, with considerable prevalence in society. In accordance with this complex etiology, current evidence supports primarily conservative multidisciplinary treatment including self-management strategies, behavioral therapy, physical therapy and pharmacotherapy. However, when these treatments fail to resolve the pain and dysfunction, minimal invasive or surgical approaches is necessary. Irrigation of the joint space reduces the inflammatory mediators as well as promotes disc repair by eliminating fibrous tissues in the joint cavity. TMJ arthrocentesis is defined as the lavage of the TMJ by using sterile needles and sterile irrigants so as to reduce the pain by removing inflammatory mediators from the joint or to increase the mandibular mobility by removing intra-articular adhesions. It can also involve the injection of medications like corticosteroids or hyaluronic acid to reduce inflammation and provide pain relief. In recent years, several studies have reported the use of autologous blood products such as Platelet-rich plasma (PRP), plasma rich fibrin (PRF) and plasma riched in platelet-derived growth factors (PRGFs) in intra-articular injection to treat TMD. The aim of this presentation is to discuss the role of arthrocentesis and intraarticular injection techniques in the treatment of TMD.

[TMJ 04]

Biomaterials used in TMJ Ankylosis: From the past to future.

Çakarer S.

Istanbul University Faculty of Dentistry at the Department of Oral and Maxillofacial Surgery, Istanbul, Turkiye.

Presentation type - symposium

The main aim of the TMJ ankylosis surgery is to remove the ankylotic bone, to maintain ideal mandibular function and to correct the facial deformity of the patient. Another important aim is to prevent the reankylosis. Therefore various biomaterials are suggested to used in order to prevent recurrence of TMJ ankylosis. The aim of this presentation is to evaluate, from the past to future, the interpositional biomaterials applied including autogenous and alloplastic biomaterials in the light of the literature and the cases we performed in our department.

[TMJ 05]

Temporomandibular joint ankylosis – comprehensive treatment.

Konstantinovic V.

School of Dental Medicine, Clinic of Maxillofacial Surgery, University of Belgrade, Serbia

Presentation type – symposium

Temporomandibular joint ankylosis is defined as bony or fibrous adhesion of the temporomandibular joint components accompanied by a limitation or complete inability in mouth opening, causing difficulties with mastication, speaking and oral hygiene. Ankylosis causes severe facial asymmetry mainly in children producing mandibular hypoplasia. It could be true or false (pseudo-ankylosis). The most often etiologic factors associated with true ankylosis are obstetric trauma and intracapsular condylar head fractures during birth delivery or early childhood. The treatment goal is to establish normal jaw motion and to correct the deformity. According to Kaban and colleagues, a standard protocol for the initial treatment of ankylosis is a sequential protocol based on aggressive resection of the ankylotic tissue, simultaneously with dissection and striping of surrounding muscles and subsequent TMJ (articular process) reconstruction. However, strict postoperative physiotherapy and subsequent orthodontic treatment are obligatory. Complications associated with initial surgical treatment could be various. Unexpected bleeding during surgery, aural–TMJ fistula, stenosis of external auditory meatus, peripheral nerve and parotid gland injuries, and unpredictable growth patterns of costochondral graft could occur. Of course, definitive surgery comprised of final correction of facial asymmetry and occlusion using orthognathic surgery. More than 30 years of experience with the treatment of patients with TMJ ankylosis will be presented.

[TMJ 06]

Condylar resorption vs. adaptation posterior to bimaxillary CCW in the presence of TMJ pathology without TMJ surgery.

Martinez A.

UVA Clinic, Montarey, Mexico.

Presentation type – symposium

There has been an extensive discussion in the literature about how to treat patients with skeletal class II, open bite, and high occlusal plane in the presence of TMJ internal derangements (ID) & condylar resorption (CR). Late relapse is due to condylar resorption because of condylar compression and TMJ disc displacement. Some authors claim long-term stable results without open TMJ procedures, while others claim you must address TMJ open surgery for stability.
Twenty-five patients, fifty condyles. Twenty-four females and 26 males. All patients with TMJ ID and CR. 24 condyles with anterior disc displacement without reduction (ADD w/o R) and 26 condyles combined ADD w/o R & CR. Patients were taken for CCW significant maxillomandibular advancement, with a mean Pg advancement of 20.08mm, without TMJ open surgery.
All cases had: Preop phase of TMJ arthrocentesis with growth factors (Endoret protocol), Mago splint, non-biological medications, and incisal edge and cusp reconstruction. Surgical phase with mandible first, mandibular double plate passive fixation. Lefort I multisegmented with four bone plates.
CTCB preop and 2 yrs postop were exported to Nemotec software, and volumetric 3D measurements were used to evaluate remodeling or resorption after CCW orthognathic surgery without TMJ open surgery.
Results. T student was used to comparing measurements, and Delta to compare the mean results. Condylar volume preop. 1087.25 +- 429.39. postop. 1080.64 +- 465.09. P789, not statistically significant.
Condylar volume according to gender. Female (24 condyles) 24.18 +- 123.98. Males (26 condyles) -9.68 +- 143.49. P.379. Males had light-positive remodeling, but it was not clinically significant.
Condylar volume, according to TMJ pathology. ADD w/o R (24 condyles) -18.33 +- 144.20. Combined ADD w/o R & CR (26 condyles) 29.63 +- 122.56. P .210. ADD w/o R had a light positive bone remodeling, compared to combined ADD w/o R & CR, but not clinically significant.
Condylar volume compared to the amount of advancement. Moderate less than 20mm advancement (32 condyles). Severe more than 20mm advancement (18 condyles). Moderate -2.45 +- 129.62. Severe 22.72 +- 144.39. P .530. Positive bone remodeling in moderate advancements, but not clinically significant.
These results demonstrate that TMJ disc position is unimportant for long-term stable results. Condyles can adapt and remodel even in CR and severe CCW bimaxillary advancements.

[TMJ 07]

The effectiveness of the arthroscopic articular disc reposition and fixation in patients with TMJ internal derangements.

Miterev A.A., Eroshenko N.A., Melikov E.A., Sultanov S.R., Drobyshev A.

A.I. Yevdokimov Moscow State University of Medicine and Dentistry, Moscow, Russia

Presentation type - E-Poster

Background - Temporomandibular joint (TMJ) anterior disc displacement leads to significant degenerative changes: a decrease in the height of the condylar process (arthrosis) and disc structural disturbances. Arthroscopic reposition and fixation of the articular disc allows restoring the position, contributes to stabilization of degenerative processes and remodeling TMJ structures, as well as leads to clinical parameters improvement. Arthroscopic TMJ disc reposition and fixation technique lead to an overall pain reduction and an increase in maximal interincisal opening compared to open surgery.
Aims/Objectives - Effectiveness evaluation of minimally invasive surgical technique in patients with TMJ internal derangements.
Methods - Our study includes 10 patients complaining of TMJ pain, clicking and crunching, and decreasing in interincisal opening (30 mm limited). According to MRI - complete anterior TMJ disc displacement without reduction. Splint therapy for 1-2 months before surgery, then arthroscopic TMJ disc reposition and suture fixation was performed. Outcomes analysis in 6 months.
Results/Findings - 6 months post op MRI determined the discs reposition, maximal interincisal opening is 45 mm, improvement of clinical symptoms - decreased clicks frequency, mouth opening pain leaved.
Conclusions - Arthroscopic suture discopexy is a minimally invasive surgical intervention that helps stabilize intra-articular structures and prevents further development of destructive and degenerative changes in bone and cartilage elements. The success of this surgical method depends on a number of factors: disc disruptions and its mobility capabilities, as well as the surgeon clinical experience and technical equipment.

[TMJ 08]

Analysis of daytime sleepiness in patients with idiopathic condylar resorption.

Miterev A.A., Sultanov S.R., Drobyshev A.Yu., Eroshenko N.A., Galazov A.T.

Moscow State University of Medicine and Dentistry, Moscow, Russia.

Presentation type - E-Poster

Background - Idiopathic condylar resorption (ICR) is a localized, non-inflammatory, degenerative disease of the temporomandibular joint (TMJ) characterized by lysis and repair of articular fibrous cartilage and underlying subchondral bone [1]. This pathology eventually leads to a decrease in the height of the branch and, as a result, the lower jaw is displaced to the rear position, which in turn leads to a narrowing of the lumen of the upper respiratory tract [2].
Aims/Objectives - Compare the level of daytime sleepiness of patients with ICR and the control group.
Methods - The study included 20 female patients who applied to the clinical center of maxillofacial and plastic surgery named after Evdokimova A.I., with a diagnosis of ICR. The control group consisted of students of dentistry of the Moscow State Medical University named after. Evdokimov A.I. from 2022 to 2023.
Results/Findings - When examining patients using the Epworth scale, it was found that the average level of daytime sleepiness in patients with ICR was 4.0 ± 2.0. In turn, the average result of daytime sleepiness obtained in the control group was 3.8 ± 1.5.
Conclusions - The study showed that there was no statistically significant difference between the average level of daytime sleepiness between the groups ($P \geq 0.05$)

[TMJ 09]

Application of methods of carboxytherapy and hardware mechanotherapy OpenWide in the concept of complex rehabilitation of patients with TMJ diseases and myofascial pain syndrome.

Popova K.A., Shipika D.V., Bagoviev A.D., Darkhanova A.E., Drobyshev A.Y.

Evdokimov Moscow State University of Medicine and Dentistry, Moscow, Russia.

Presentation type - E-Poster

Background - A widespread problem of complex rehabilitation of patients with TMJ diseases and myofascial pain syndrome requires the development of effective treatment algorithms.
Aims/Objectives - Evaluation of the clinical effectiveness of the complex application of carboxytherapy and hardware mechanotherapy OpenWide in the protocol for the

treatment of patients with TMJ diseases and myofascial pain syndrome.
Methods - We formed 34 patients research group with triad of signs: 1) pain; 2) reduced mouth opening: less than 39 mm; 3) internal TMJ disorders according to MRI. Patients were examined according to the protocol of the adopted algorithm: clinical diagnostic methods, radiation methods (MRI of the TMJ, "Venovisor"), electromyography with measuring the IMPACT index: ≥1500mkV is hypertonicity of chewing muscles. The main methods of treatment in this research were: hardware mechanotherapy OpenWide and carboxytherapy. Hardware mechanotherapy is a using specialized device, which allows to perform 3 phases of lower jaw movements according to the physiological kinematics of mouth opening. The carboxytherapy method allows to relax chewing muscle and improve microcirculation of maxillofacial region.
Results/Findings - On day 21, we documented: an increase the amplitude of mouth opening by 12.2 ± 2.25 mm, a decrease IMPACT index by 502 ± 292.4 mkV, a decrease of pain syndrome by 5 ± 0.5 points according to VAS.
Conclusions - Analysis of the obtained results allows us to recommend the developed algorithm for the combined algorithm OpenWide hardware mechanotherapy and carboxytherapy for use in the protocol for the treatment of patients with TMJ diseases and myofascial pain syndrome.

[TMJ 10]

Discopexy in complex treatment of patients with TMJ disorders.

Shipika D.V.,. Drobyshev A.Y

Department of Maxillofacial Reconstructive and Plastic Surgery of Moscow State University of Medicine and Dentistry named after A.I. Evdokimov, Moscow, Russia

Presentation type - Oral presentation

Background - The problem of rehabilitation of an epidemiologically large group of patients [with TMJ diseases, myofascial pain syndrome , prosopalgia does not lose its relevance. An urgent task is to develop and introduce into clinical practice rational methods of treatment with proven effectiveness to restore the physiological kinematics of lower jaw movements and improve the quality of life of patients.
Aims/Objectives - Objectives According to Wilkes classification of temporomandibular disorders, there is a gradual aggravation from initial internal derangements to more pronounced ones, and further with the development of deforming osteoarthritis and, ultimately, ankylosis. Therefore, one of the goals of a complex treatment plan is to restore normal position of the internal elements of the joint, and no less important is the subsequent preservation of this position in the postoperative period. The above is feasible using dyscopexic techniques. This study was carried out in order to evaluate the effectiveness of discopexic techniques TMJ with the use of cold-plasma ablation and blood plasma enriched with growth factors (PRGF).
Methods - Material and methods: This study involved 50 patients who were treated at the Department of Maxillofacial and Plastic Surgery with TMJ discopexy. The inclusion criteria were the presence of pain, the limitation of mouth opening and internal derangements according to magnetic resonance imaging (MRI). The surgical technique

was performed according to the algorithm accepted at the department. All patients were examined before and after the operation clinically and with use of MRI.
Results/Findings - Results: All patients had a complete disappearance or reduction of pain by an average of 83%, estimated by them on a visual-analogue scale, the opening of the mouth increased by an average of 68.5%. The study revealed no complications. On MRI after operation were evaluated the correct position of internal joint elements with closed and opened mouth.
Conclusions - Conclusion: The study showed that the use of discopexic techniques with cold-plasma ablation and blood plasma enriched with growth factors, led to a significant reduction of pain and the increase of mouth openings. It is a safe and effective method for treating patients with TMD.

[TMJ 11]

Alloplastic Total Joint Replacement for End-Stage TMJ

Varol A.

Department of Oral and Maxillofacial Surgery at the Bahcesehir University, Istanbul-Turkiye.

Presentation type – Plenary session

End-stage temporomandibular joint disease is a challenging clinical situation requiring functional and esthetic rehabilitation of affected patients. Joint dysfunction,level of pain,degree of condylar resorpiton, restriction of mandibular motion are main all disabilitating parameters of an end-stage TMJ disorder. Alloplastic total joint replacement offers predictable outcome with acceptable range of motion in severely destroyed joints.

OMF Trauma surgery [TS]

[TS 01]

Metamorphosing Community Engagement: A Synergistic Strategy for Augmenting Maxillofacial Trauma Awareness through Specialized Training, Orchestrated by Public Relations.

Azim S.A., Annamma L.M., Alharmi J.

Gulf Medical University, Ajman, United Arab Emirates.

Presentation type - Oral presentation

Background - Oral and maxillofacial surgery (OMFS) is a critical branch of healthcare, and effective public relations (PR) are indispensable in this domain. This study highlights the compelling need for PR strategies to disseminate awareness about OMFS traumas within the community, with a particular focus on key stakeholders like educational institutions. Additionally, it introduces a transformative Train-the-Trainer (TOT) program. Contemporary healthcare organizations, exemplified by institutions like Emirates Foundation - Sanid, Volunteers.ae, and SOS Village schools, have recognized the significance of tailored volunteer training programs. These initiatives, designed to align with specific events and missions, offer valuable skills to volunteers. However, this study underscores the necessity for specialized training, particularly for facial traumas, as an essential component of volunteer preparation. It approaches the subject of community volunteering from a management perspective. In the modern healthcare landscape, PR transcends its traditional role and integrates seamlessly into the core of management teams. It plays an instrumental role in advancing organizational goals and substantiating accountability through tangible outcomes. This concise overview encapsulates the critical role of PR in OMFS, advocating for specialized training, and underscores the ongoing evolution of PR within the healthcare management framework.
Aims/Objectives - Our research seeks to identify the necessity of specialized training in OMFS traumas and evaluate the role of PR in managing volunteer teams. We aim to determine the extent of knowledge and skills among volunteers, mainly focusing on non-medical backgrounds. Additionally, we assess the confidence levels of volunteers in dealing with OMFS trauma scenarios.
Methods - This research spanned two countries, the United Arab Emirates and Azerbaijan, and included participants from educational institutions and Emirates Foundation-Sanid UAE volunteers. In addition to the survey-based research, training sessions were organized at SOS Children's Village in Azerbaijan to enhance the skills and knowledge of volunteers, including approximately 15 participants from the SOS organization, including higher management, in managing OMFS traumas. A comprehensive literature review was conducted using databases such as PubMed, Medline, and Cochrane. A specialized Arabic questionnaire, comprising 15 questions, was developed to assess volunteers' understanding of OMFS trauma, anatomy, diagnosis,

and management. The survey was distributed to Emirates Youth Organization volunteers aged 18-45 through Google Forms, utilizing convenience sampling. Convenience sampling was used.
Results/Findings - The literature review revealed a substantial prevalence of OMFS traumas, highlighting the imperative requirement for specialized volunteer training. Among the 100 distributed questionnaires, 79 were completed, yielding the following key findings: Background and Training: A notable 94.9% of respondents lacked a medical background, underscoring potential deficiencies in delivering medical assistance. Encouragingly, 79.2% of participants exhibited a positive inclination toward receiving medical training. Management of Bleeding: A commendable 88.6% of volunteers reported an absence of aversion to blood, a pivotal attribute for proficiently addressing traumatic bleeding incidents. Furthermore, 87.3% expressed confidence in their ability to effectively manage nasal bleeding. Anatomical Knowledge: Volunteers demonstrated praiseworthy familiarity with anatomical landmarks, with 86% asserting their competence in managing unconscious patients. However, only 60.8% displayed confidence in their grasp of head and neck anatomy. Diagnosis and First Aid: Significantly, 62% of volunteers exhibited adeptness in symptom recognition, vital for diagnosis and complication identification, extending their proficiency to care for handicapped patients. Clinical Scenarios: Surprisingly, a mere 29% of volunteers had prior exposure to clinical scenarios pertaining to OMFS traumas, possibly stemming from a misunderstanding of the question's intent. Psychological Support: Volunteers evinced confidence in stabilizing patients' psychological well-being, with 82% demonstrating the capacity to assess vital signs and 91.1% adept at effectively calming patients. Specialized Training Need: Despite their overall proficiency in various facets of OMFS trauma management, a significant 96.2% of volunteers articulated the necessity for specialized training in addressing emergency clinical scenarios. An overwhelming 97.4% acknowledged the paramount importance of advanced knowledge in this field to provide comprehensive patient support.
Conclusions - This study carries a resounding message to the associations of Oral and Maxillofacial Surgeons (OMFS) worldwide. It underscores the imperative need for a united front, where OMFS associations join hands in the development of a comprehensive training algorithm. This algorithm, crafted in collaboration with diverse educational organizations, should serve as a beacon for the future of trauma management education, with a particular highlight on unique Train-the-Trainer (TOT) programs. The findings presented here are not just insights; they are a clarion call to action. They emphasize the critical importance of specialized training in augmenting the skills of those volunteering, especially those without a medical background. As these volunteers are often the first responders in OMFS trauma situations, their proficiency can be a matter of life and death. Furthermore, the role of public relations in the orchestration and facilitation of such training cannot be overstated. It is through PR that communities can be engaged, awareness can be raised, and healthcare assistance can be optimized. In this pursuit, we advocate for the adoption of individualized training approaches, tailored to address the specific needs of each volunteer. This approach ensures that every member of the community is well-equipped to respond effectively to OMFS traumas. These findings not only serve as a catalyst for immediate action but also lay the essential groundwork for future research endeavors and the development of precisely targeted training programs. The time for change and collaboration is now, and this study stands as a testament to that call for transformation in OMFS trauma management education

[TS 02]

Title: Microsurgical Reconstruction in Combat-Related Trauma: A 10-Month Experience.

Dikarev A.S., Vardanyan S.A., Mantardzhiev D.V., Sergeev I.S., Sychev V.I.

LLC Aesthetic Collective

Presentation type-Symposium

Background: Characteristics of combat trauma have evolved over the past decades due to
changes in warfare conduct and tactics. The shift in the ratio of fatal injuries to non-life-threatening injuries has led second and third-line medical facilities to encounter a higher number of patients with limb and maxillofacial injuries. Traditional methods of wound management without reconstructive-plastic surgeries result in extended bed turnover times and overcrowded wards in combat conditions. The final surgical restorative treatment often
faces delays due to the multi-stage medical evacuation of the wounded. Most costly reconstructive microsurgical interventions are still performed in well-equipped specialized
federal centers at later stages after the trauma. In the best-case scenario, this extends post-traumatic rehabilitation periods, while in worse cases, it significantly reduces the quality of life, limiting or excluding the possibility of full physical and social rehabilitation.
Aims/Objectives: To analyze the effectiveness of performing microsurgical operations in the early post-traumatic period.
Methods: The authors present their experience in conducting microsurgical operations over a 10-month period from 2022 to 2023, based on the microsurgery department.
Results/Findings: Sixty-two reconstructive-plastic surgeries were performed, with microsurgical techniques applied in forty-seven cases (73%). Eleven types of flaps were utilized, with flap loss observed in one case (1.6%). The reconstruction operation durations ranged from 12 to 60 days.
Conclusions: The presented experience demonstrates that surgical teams can perform complex reconstructive operations in resource-limited conditions. This experience is relevant not only for the treatment of combat trauma but also for the decentralization of microsurgical services

[TS 03]

A new approach in management of orbital adherence syndrome.

Hasanov F., Ahmadov S., Isgandarova S.

Department of Oral and Maxillofacial surgery, Azerbaijan Medical University, Baku, Azerbaijan.

Presentation type - Oral presentation

Background - We report case of complications of orbital mesh implants used in the repair of orbital fractures and to prevent this the results from the use of our own idea of smooth-surfaced titanium implants.
Aims/Objectives - Our aim is to eliminate the orbital adhesion syndrome that occurs after titanium mesh with a smooth surface plate.
Methods - We conducted our study on 18 patients. Group A-11 patients (used orbital mesh implants), B group-7 patients (used own titanium implants). Three of the 11 patients (27,7%) we used orbital mesh were admitted to the Azerbaijan Medical University-ESC with the complaint of diplopia (orbital adherence syndrome).
Results/Findings - In our 1,5-year study, 3 patients (27,7%) in whom we used orbital mesh reappeared with the complaint of diplopia. We saw that the complication at the time of surgery is related to orbital adherence syndrome. No complications were observed in routine controls in 7 patients (100%) for whom we used our own titanium implants (3 female, 4 male).
Conclusions - In our study, we observed orbital adhesion syndrome in 27% of patients who underwent orbital mesh implant surgery. We noticed that the larger the pores in the orbital mesh, the greater the adhesion between the implant and the eye muscles. Implant materials used in orbital floor fracture surgery should be inert with a flat profile rather than a mesh to prevent adhesions through the mesh that may cause cicatricial eye movement restriction.

[TS 04]

Biodegradable structures based on magnesium alloys for osteosynthesis in medicine - development and prospects for use.

Redko N., Miterev A., Sviridov E., Komissarov A., Gurganchova Z., Drobyshev A.

Moscow State University of Medicine and Dentistry, Moscow, Russia

Presentation type - Oral presentation

Background - Several million people annually suffer from bone fractures caused by accidents or various diseases. In a large part of these operations (up to 50%), titanium structures and elements fixing bone tissue are used. Currently, active developments are underway on the use of products from various bioresorbable magnesium alloys

in medicine and veterinary medicine. Magnesium-based alloys developed in recent years have shown improved corrosion resistance and mechanical properties and are promising materials for making biodegradable, biocompatible metal implants.
Aims/Objectives - The aim of the study was to determine the possibility of bioresorption of a magnesium alloy product
Methods - Wistar rats, where the level of resorption of pins installed in the femur at stages of 1-6 months was assessed. The rate of resorption was assessed according to the data of X-ray diagnostics, histological assessment, SEM and EDX. In the early postoperative period, healing was planned, without any features. The results obtained indicate a significant bioresorption of the magnesium pin at 3 months and complete degradation 6 months after operation.
Results/Findings - According to the X-ray methods of examination, it is determined that the established pins gradually degrade in the period from 1 to 6 months, reducing their average density. Bone formation after implantation demonstrates osseointegration and good biocompatibility with the surrounding bone tissue.
Conclusions - These findings are sufficiently encouraging to motivate further research to broaden the experimental to conduct tests involving larger animals. The authors are grateful to the Ministry of Science and Higher Education of the Russian Federation for financial support under the Megagrant (No. 075-15-2022-1133).

[TS 05]

Modern aspects of surgical treatment of patients with post-traumatic defects and deformities of the middle zone of the face.

Mikhailyukov V.M., Drobyshev A.Yu., Levchenko O.V., Tibilov D.V.

A. I. Evdokimov Moscow State University of Medicine and Dentistry, Moscow, Russia.

Presentation type - Symposium

Background - Currently, the number of patients with injuries of the cranio-maxillofacial region in Russia continues to increase steadily. In this case, damage of the middle zone of the face is up to 24% of all head injuries. At the clinical bases of the TsS and ChLH MGMSU them. A.I. Evdokimov and NII SP them. N.V. Sklifosovsky for the period from 2010 to 2023, 223 patients with post-traumatic defects and deformities of the bones of the middle zone of the face were operated on.
Aims/Objectives - The aim of the study is to increase the effectiveness of surgical treatment of patients with post-traumatic defects and deformities of the midface.
Methods - Post-traumatic defects and deformities of the orbit were accompanied by hypophthalmos and enophthalmos of varying severity. Orbital floor defect plasty was performed using: autografts from the parietal region, implants made of reinforced porous polyethylene, titanium meshes, individual Peek implants. In 134 patients, the planning of surgical treatment was carried out according to MSCT data using stereolithographic models, in 49 patients - individual 3D computer modeling of the surgical intervention, 40 patients were operated using the intraoperative frameless navigation technique.This technique allows virtual modeling of the implant/autograft in the area

of the bone defect, the anatomical position of the displaced bone fragments and the eyeball according to MSCT due to the "mirror" display of the bone anatomy of the intact side, as well as intraoperative control of the position of the repositioned bone fragments, the implant/autograft and the eyeball using the pointer of the navigation system.
Results/Findings - According to postoperative MSCT, the reconstruction of the correct anatomy of the bones of the facial part of the skull, the shape and position of the installed implants, reduced bone fragments were better in the group jf patients operated on using frameless navigation. All patients noted the disappearance of double vision in the central position of the gaze.
Conclusions - The developed method of intraoperative frameless navigation in the surgical treatment of this category helps to reproduce the shape, volume and position of bone fragments, implants and autografts as accurately as possible, to assess the position of the eyeball intraoperatively, which allows achieving high functional and aesthetic results.

[TS 06]

Optimizing Management of Pediatric Jaw Fractures: Mitigating Complications for Enhanced Outcomes.

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Presentation type - Oral presentation

Background - Fractures of the jaw in children present unique challenges due to their occurrence in rapidly growing bones. Successful treatment in this population hinges on precise trauma assessment and prompt initiation of appropriate interventions. Notably, approximately 50% of children harbor latent odontogenic infection foci, which can become activated during mixed injuries, contributing to the development of purulent processes in the maxillofacial region and other areas through metastasis.
Aims/Objectives - This study aims to enhance the outcomes of traumatic jaw injury treatment in children and reduce associated complications.
Methods - We conducted an analysis of 70 children treated for jaw fractures at the Maxillofacial Surgery Department of the Baku Clinical Medical Center from 2010 to 2018. Our examination and studies included children of both sexes up to 16 years of age.
Results/Findings - Despite modern treatments, complications in pediatric jaw fractures remain significant. Tailored approaches based on age and displacement yielded positive results. Comprehensive management is essential in pediatric cases.
Conclusions - Complications in pediatric jaw fractures persist despite modern treatments. Tailored approaches based on age and displacement yielded positive results, emphasizing the need for comprehensive management in pediatric cases.

[TS 07]

Transoral endoscopically assisted management of the mandibular condylar fractures.

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Presentation type – Plenary session

Mandibular condylar fractures are frequent, accounting for 31 to 43% of all fractures of the mandible. It is suggested that better results can be obtained with intraoral endoscopically assisted reposition and osteosynthesis than with traditional open approaches. There is also benefit of minimal risk to the facial nerve injury. Intraoral endoscopically assisted approach to the mandibular condylar fracture was carried out in 436 patients in the Department of Carnio-Maxillofacial Surgery MUW between 2005 and 2015. There were 328 subcondylar, 116 neck and 17 head fractures. In all procedures a 4 mm in diameter, 18 cm in length and 30o angled endoscope was used. The fractured fragments in most cases were fixed with one 2.0 titanium miniplate (4 holes, 4 screws) by means of one trokar inserted in the parotideomasseteric region. In 25 patients intraoral approach were bilateral. Initially, our average operating time for the treatment of one condylar fracture was approximately 90 min. When the approach became a routine method of fracture treatment the average operating time dropped to 30 min. A postoperative facial nerve palsy has been observed in 3 patients. The final functional and esthetic effect of the treatment in each case was assessed as good. The plates were removed in 39 cases. Intraoral endoscopically assisted osteosynthesis of mandibular condylar fractures seems to be a safe and effective surgical method.

Author index

Abbasov E. 24
Acero J. 73
Abdullayev E. 149
Abdullayev K.F. 50
Abdulmohsem K. 70
Abdumomunova A. 25
Abduragimova M. 64
Abdysamatov B. 25
Agalar S.A. 77
Ahmedov E.T. 33/136
Ahmadov S. 147
Akbarov E. 73
Akdeniz B.S. 86
Akdeniz S. 87
Akkor B.B 137
Asan C.Y 90/95
Alharmi J. 144
Aliquliyev V.K. 102
Aliyeva M.S. 85/102
Aliyeva A.M. 123
Aliyev A.A. 55
Aliyev A. 74
Aliyev B.S. 61
Aliyev M. 103
Aliyev J.A 123
Ali R., ... 67
Aliyev T. 26
Alkan A. 87/96/108
Altiparmak N. 87
Altuwairgi O. 75
Amiraliyev N.M. 51
Amiraliyev K.N. 51/128
Anashkina D.Y. 111/112
Andreishchev A.R. 88/104
Andreischev A. 52
Annagiyev E.F. 123
Annamma L.M. 144
Arslan A. 46
Asadov R.N. 110
Asan C.Y. 90/95
Aslanov P. 53/54
Atac M.S. 27/89
Atayeva Z.H. 55
Azim S.A. 121/144
Bagaev A.B. 104
Bagoviev A.D. 141
Balaji S.M. 106/106
Bakhishov H. 28
Bashirov S.G. 123
Batyrov T.U. 47
Batyrev A. 56
Bayramov R. 119
Benlidayı E. 107
Berro F. 94
Biemer E. 56
Bilalzadeh S.Y. 85
Bilge S. 31/94/96
Bogdanova O. 99

Çelebi S. 90
Çakarer S. 138

Cabbar F. 46
Cansiz E. 89
Canpolat DG. 95
Coskunses F.M. 28
Chebotarev S.Y. 104
Chowdhury F.A. 37

Darkhanova A.E. 141
Davudov M.M. 75
Demirbaş A.E. 29/31/90/91
Demirbaş M.D 29
De Ponte F.S. 79
Dikarev A. 56/146
Dobrokhotova V.Z. 63
Dogruel F. 94
Drobyshev A.Y. 30/104/141
Dyugay G. 91
Dzeranova I. 99

Ekici R. 29
Epifanov S. 109/116
Eroshenko N.A. 140/141
Eshiev A.M. 94
Eshiev D.A. 92
Ewers R. 30
Farzaliyev I.M. 30/115
Farajov E. 38
Fattahov A. 108
Fedotov R. 109/116

Galazov A.T. 141
Galie M. 93
Gasimov A.V. 77
Gasimov J.L. 77
Gasimov N. 94
Gayibov N. 29/31

Gileva K.S. 50
Guliyev M.D. 57/58
Godin G. 52
Golomazdin P. 98
Golovanev P.S. 110
Gorban V. 104
Guliyev S.B. 33
Grigoriev A. 99
Grimm W.D. 32
Guliyeva G.H. 59/60
Guliyev A.H. 33/136
Guliyev S.E. 59/60
Guliyev T.R. 37
Guliyev V. 47
Gurbanaliyeva G.I. 86/136
Gurbanov V. 35
Gurganchova Z. 147
Gurianov A. 129
Gurianov R. 129

Halil S. 55
Hasanova P.A. 61
Hasanov F. 147
Hasanov J. 36
Hoffmann J. 62
Huseynov A.A. 37
Huseynzadeh A.G. 55

Ibrahimov R. 38
Ibrahim O.Y. 40
Ilyasov N. 130
Imanov E. 141
Iskenderov E.R. 123
Isgandarova S. 124/147
Ivanov A.L. 111/112
Izotov O. 100

Jafarov M.A. 136
Jafarov R. 141

Kaba Y.N. 96
Kalavrezos N. 62
Kalbaev A. 25
Kantaputra N. 42
Karachunskii G. 113/129
Katashev M. 94
Kazimli I. 95
Kaya B. 87
Khasanov A. 99

Klipa I.A. 30/104
Komissarov A. 147
Konstantinovic V. 138
Kropotov M.A. 63
Kuliev T. 64
Kydykbaeva N. 25

Lashuk S. 67
Lemma F. 43
Levchenko O.V. 148

Mahmudov V.S. 43
Maharramli N 119
Makhkamova N.E. 83
Mamedova A.M. 102
Mammadov D. 65
Mammadov T. 96
Mamedov E.V. 55
Mamedzadeh R. 66
Manekenova K. 47
Mantardzhiev D. 56
Marincola M. 30
Martinez A. 97/139
Melikov E. 67/98/99/140
Meningaud J.P. 67/68
Miskinli R.Z. 123
Miterev A.A. 140
Mikhailyukov V.M. 148
Mishustina J. 104/52
Morgan V.J. 30

Nadirova L. 131
Nagy K. 114
Nkenke E. 69
Nurmaganov S. 130

Omarov T. 47
Önder M.E 44
Ord R.A. 77
Ovsoyan G. 56
Özçakır Tomruk C. 46

Pankov E.V. 132
PanahianV.M. 77
Perisanidis C. 78
Perpetuin P. 30
Petrovic I. 45
Popova K.A. 141
Popova Y.V 30

Popovski V. 125
Prabhu S. 70/79

Rachmiel A. 45/79
Rahimov Ch.R. 51/115
Rajan G. 46
Redko N.A. 132
Reha S.K. 117
Reshetov I. 80
Reshetnyak E.I. 111
Rizaj X. 26
Rzayev R.M. 117
Rzayev R.R. 117
Rudoman S. 52/104

Sakkal Z. 70
Sartawi M. 71/80
Saprina O.A. 63
Saydam B. 46
Sergeev I. 56/146
Serik A. 130
Shah J.P. 81
Shahin O. 26
Shayakhmetov D. 25
Shipika D.V. 141/142
Shuba M. 109/116
Shulakov V. 67
Sieg P. 82/118
Sipkin A. 113
Soltanova R. 71
Sorokina M. 100
Soylu E. 96/108
Smanalieva D. 25
Smanaliev M. 25
Sukacheva S.A. 111
Sultanova N.N. 120
Sultanov S.R. 140/141/
Sushenko A. 132
Sviridov E. 100/147
Staricova N.V. 111
Stopa Z. 150
Studenikin R. 132
Sychev V. 56/146
Şimşek F. 26

Tibilov D.V. 148
Tonkikh-Podolskaya O. 113

Toniya D. 100
Tomarchio M.A. 82
Topan C. 96
Topolnitskiy O. 109/116
Tuz H. 100

Usmanova N.A. 83

Vardanyan S. 56
Varol A. 143
Vaulina D.S. 132
Verdiyev N.D. 117

Walji S. 72/126
Warraich R.A. 84

Yakovlev S. 109/116
Yıldırım I. 121
Yilmaz C. 96
Yusubov A. 38/121
Yusubov Y.A. 85/121

Zangieva O. 109/116
Zhakanov T. 130
Zharilkassimov R. 47/130

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