edad
TURKISH ACADEMY OF ESTHETIC DENTISTRY

INTERNATIONAL FEDERATION
OF ESTHETIC DENTISTRY



13th World Congress of Esthetic Dentistry

25-27 April 2024, İSTANBUL

Wyndham Grand İstanbul, Levent

ABSTRACT BOOK

CONTENTS

COMMITTEES

WORKSHOP

SCIENTIC PROGRAMME

ABSTRACTS

ORAL PRESENTATIONS

POSTER PRESENTATIONS

COMMITTEES

EDAD BOARD

President
Dr. Selim Çömelekoğlu

Honorary Presidents
Dr. Galip Gürel
Prof. Dr. Ata Anıl
Prof. Dr. Selim Pamuk
Dr. Haşmet Gökdeniz

Vice President
Prof.Dr. Tonguç Sülün

General Secretary
Dr. Melih Tarhan

Treasurer
Prof. Dr. A. Burak Çankaya

Members
Prof. Dr. Hande Şar Sancaklı
Doç. Dr. Yılmaz Umut Aslan
Doç. Dr. Çağatay Dayan
Doç. Dr. Bora Korkut
Uzm. Dt. Merve Erdoğ Özgür
Dr. Oğuzhan Hakan Özdemir
Dr. Mürvet Yıldız Kölemen
Dr. Onur Öztürk

IFED BOARD

President
Prof. Dr. David Garber

Past President
Prof. Dr. Jaime Gil

President Elect
Prof. Dr. Selim Pamuk

General Secretary
Prof. Dr. Robert Sader

Treasurer
Dr. Debora Vilboa
Dr. Andrea Ricci
Dr. David Winkler
Dr. Vincent Celenza
Dr. Takashi Nakamura

WORKSHOP

THURSDAY APRIL 25TH

10:30-12:30 Predictable Treatment Protocol and Workflow with R2Gate Digital Implantology
Dr. Cem Dergin

13:30-15:30 Surgical and Prosthetic Approaches to Peri-implant Soft Tissue Contouring
Dr. Ebru Karacebe Çal
Dr. Lecturer Member Mehmet Gümüş Kanmaz

16:00-18:00 Digital Prosthetic Kitchen of Implantology
Cdt. Özcan Akyıldız

SCIENTIFIC PROGRAMME

FRIDAY APRIL 26TH

09.00-10:00	**Registiration**
	Moderator: Prof. Dr. Cüneyt Karabuda
10:00-11:00	Occlusion for the Aesthetic Dentist in the Digital Age
	Dr. Ian Buckle
11:00-11:45	**COFFEE BREAK**
	Moderator: Prof. Dr. Hanefi Kurt
11:45-12:45	Painting with Light : An Insiders View of Natural Teeth
	Dr. Luiz Narciso Baratieri
12:45-13:45	**LUNCH**
13:45-14:15	**Opening Ceremony**
14:15-14:45	Closing The Gap Between You and Your Patient: Identifying Barriers & Meaningful Solutions to Improve Patient Care
	Dr. Koula Asimakopoulou & Dr. Nesrin Dilbaz
	Moderator: Prof. Dr. Buğra Özen
14:45-15:45	Resin Infiltration: Ultraconservative Esthetic Solutions for Carious and Non-Carious Enamel Lesions
	Dr. Zafer Çehreli
15:45-16:15	**COFFEE BREAK**
	Moderator: Assoc. Prof. Yılmaz Umut Aslan
16:15-17:15	Beauty and Biology: Success Prevision Failure Prevention
	Dr. Magda Mensi & Dr. Diego Lops
	Moderator: Prof. Dr. Atilla Sertgöz
17:15-18:15	Designing the Full Mouth Implant Rehabilitation – from FP1 to FP3
	Dr. Stavros Pelekanos
18:15-19:15	World Challenge Competition
20:30-00:00	**Gala Dinner**

HALEON

SATURDAY APRIL 27TH

	Moderator: Prof. Dr. Ata Anıl
09.30-10:15	Peri-implantitis: The Future Nightmare in Esthetic Dentistry **Dr. Gil Alcoforado**
	Moderator: Prof. Dr. Kemal Ünsal
10:15-11:00	Observations and Solutions for Cranio-Facial Growth, Surgery in the 4th Dimension **Dr. Oded Bahat**
11:00-11:30	**COFFEE BREAK**
	Moderator: Prof. Dr. Bahar Eren Kuru
11:30-12:15	Are Implants Better Than Teeth? **Dr. Vincent Celenza**
	Moderator: Prof. Dr. Hande Şar Sancaklı
12:15-13:00	Worn Dentition? Direct and Indirect Adhesive Restorative Approach **Dr. Riccardo Ammannato**
13:00-13:30	**Panel Discussion** | Moderator: Prof. Dr. Hande Şar Sancaklı
13:30-15:00	**LUNCH**
	Moderator: Prof. Dr. Selim Pamuk
15:00-15:45	Getting the Teeth in the Right Place with Beautiful Dentures. The Important Diagnostic Step Before Dental Implant Provision **Dr. Finlay Sutton**
	Moderator: Prof. Dr. Selçuk Basa
15:45-16:30	Facially Guided Implant Rehabilitations **Dr. Jose Manuel Reuss**
16:30-17:00	**COFFEE BREAK**
	Moderator: Prof. Dr. A. Burak Çankaya
17:00-17:45	Guided Implant Surgery and Placement – Can We Afford Not To? **Dr. Koray Feran**
	Moderator: Prof. Dr. Aslan Gökbuget
17:45-18:30	Creating the Optimal Soft Tissue Attachment and Volume Around Dental Implants – The Key to Long Term Success **Dr. Robert Oretti**
18:30-19:00	**Panel Discussion** | Moderator: Prof. Dr. Kleanthis Manolakis

ABSTRACTS



GIL ALCOFORADO

DMD, PH.D., FICD, FACD

PERI-IMPLANTITIS: THE FUTURE NIGHTMARE IN ESTHETIC DENTISTRY.

Since the establishment of the concept of osseointegration the use of endosseous implants has not stopped growing. For some years, implants have been used to substitute missing teeth of both partially and fully edentulous individuals.

The number of implants placed all over the world keeps increasing every year. At times, some of these implants are placed in less than favorable conditions. Certain authors estimate that around one of each four implants placed could develop peri-implantitis. Our current knowledge on how to treat peri-implantitis is still far from being up to par. All these conditions could contribute to a major health issue in the very near future.

Several systemic and local risk factors have been identified which will be discussed. It has been suspected that periodontal conditions of patients could negatively influence the health of the peri-implant tissues. The etiopathogenesis of mucositis and peri-implantitis will be presented as well as their diagnosis and treatment. As a major conclusion, one should take all possible measures to prevent the peri-implant diseases from developing. Prevention, at every single step of implant rehabilitation, is the key for maintaining the peri-implant tissues healthy and minimizing the risks of implant failure.

CV

Graduated in Dentistry in 1980 – University of Lisbon
Specialty in Periodontology – University of Bergen, Norway - 1983
Visiting Researcher at the U. of Pennsylvania with Profs. Jorgen Slots, Sture Nyman and Max Listgarten – 1986
Visiting Professor at the University of Michigan in Ann Arbor – 1989/1990
Ph.D. in Periodontology at the University of Lisbon – 1995
Visiting Professor at the U. of Southern California – 2000 - 2016
Chairman and Full Professor, Depart. of Periodontology and Director of the Master Program in Periodontology (3 years program), U. of Lisbon – 1995-2014
Vice-Dean Lisbon Dental School, University of Lisbon -2000 – 2004
Founder and Past-President of the Portuguese Periodontal Society
Past-President of the European Federation of Periodontology
Fellow of the International College of Dentists (ICD), since 1985, Regent for Portugal from 2009 to 2019 and Immediate Past-President of the European Section ICD
Chairman of the Philip Dear Foundation – ICD – European Section – from 2013 to 2020
Fellow of the Pierre Fauchard Academy
Fellow of the International Team for Implantology, Past-Chairman of the Iberian ITI Section
Fellow of the American College of Dentists – Since 2009
President-Elect and Board Member of the EAO (European Association of Osseointegration) – since 2012. Responsible for the EAO Master Clinician Courses. Chair of the Education Committee.
Recipient of the European Federation of Periodontology "The Board Service Award as President" (1997-1998) and "The Distinguished Service Award" – 2020
Recipient of the Silver Medal of the EAO - 2019
Volunteer of the Mundo-a-Sorrir NGO since 2007
Rector/Dean of the Egas Moniz University, Lisbon, Portugal, since 2018
Private Practice limited to Periodontology and Implant Rehabilitation
gil.alcoforado@clinicaalcoforado.pt



RICCARDO AMMANNATO

DDS

WORN DENTITION?
DIRECT AND INDIRECT ADHESIVE RESTORATIVE APPROACH

The main goal of this lecture is to provide, indications and protocols to diagnose and treat severe worn dentition through a new no prep "hybrid" approach increasing the VDO: 1) a direct workflow "The Index technique"; 2) The lecture will also focus on when and how to bond on worn dentition, additive partial indirect restorations (onlays/overlays) in composite and/or ceramic, depending on the indications.

All the step by step protocols will be addressed through step by step images and videos on patients, in order to have a clear over view of this hybrid (direct-indirect) technique through an analog and digital workflow.

Learning Objectives

How to diagnose worn dentition (corrosion; attrition; abrasion; abfraction).
Opening the VDO and planning the treatment plan
The indications and protocols for a no prep direct adhesive approach: "The Index Technique".
The indications and protocols for a minimal invasive indirect adhesive approach through composite and/or ceramic onlays/overlays.

CV
Graduated at Genoa University (Italy)

Internship at the Department of Operative and Restorative Dentistry, University of Zurich under the guidance of Prof. F. Lutz; studying adhesive dentistry and its applications in operative and prosthetic dentistry.

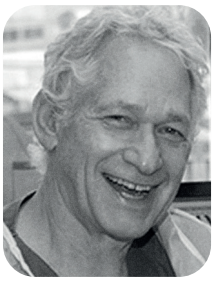
Teacher at University of Rome Tor Vergata (Italy), for the year 2017, in Restorative and Esthetic Dentistry. Direct by Prof F. Mangani.

Active Member of the European Academy Esthetic Dentistry (EAED); Active Member of the Italian Academy of Operative AIC (Accademia Italiana di Conservativa) since; Active Member of the Italian Academy Esthetic Dentistry (IAED).

He has developed and published in 2015 and 2018 on the International Journal of Esthetic Dentistry (IJED), a new and no prep approach to restore worn dentition: The "Index Technique"

Author of articles on adhesive and restorative dentistry and speaker in international courses and congresses.

He currently practices at his office in Genoa, with multidisciplinary approach, but focusing on esthetics and restorative dentistry



ODED BAHAT

BDS, MSD, FACD

OBSERVATIONS AND SOLUTIONS FOR CRANIO-FACIAL GROWTH, SURGERY IN THE 4TH DIMENSION

Facial changes havebeen domanstrated in all age groups, although the exact time of onset, magnitude, and vectors are variable and not predictable. Such three dimensional changes in the position of teeth, bone, and soft tissue relative to the static position of the implants, over time, can introduce esthetic and functional negative consequences. A new surgical protocal to reduce these unintended complications, as well as various grafting procedure and techniques, will be discussed.

Learning objectives:
- Identify the vectors of cranial changes in both men and women that are clinically significant for implant reconstruction.
- Explore surgical planning pssibilities to minimize and slow down the impact of such changes.
- For patients already treated, review surgical correction possibilities and correct as necessary.

CV

Dr. Bahat graduated from the University of the Witwatersrand School of Medicine and Dentistry in South Africa in 1977. He received his specialty degree in Periodontology and his M.S.D from the University of Washington in 1981. He is a diplomate of the American Board of Periodontology since 1986. He was the chairman and director of the Post Doctorate Periodontics at the University Of Southern California School Of Dentistry in Los Angeles, California from1983-87. He lectured extensively nationally and internationally on many surgical topics primarily related to surgical reconstruction of bone, soft tissue and implant reconstruction. He has published over 50 scientific articles and has edited multiple chapters in various textbooks. He is on the review board of the International Journal of Oral & Maxillofacial Implants. He is currently in a private practice limited to surgical reconstruction implant surgery and periodontics in Beverly Hills, California and operates 3 times a year in London U.K. In 2018 Dr. Bahat was the recipient of the Master Clinician Award from the American Academy of Periodontology.



LUIZ NARCISO BARATIERI

DDS, MS, PHD

CV

PROFESSOR AND CHAIR, DEPARTMENT OF OPERATIVE DENTISTRY, FEDERAL UNIVERSITY OF SANTA CATARINA, FLORIANOPOLIS, SANTA CATARINA, BRAZIL

CERTIFICATION IN PERIODONTICS

POST-DOCTORATE DEGREE, UNIVERSITY OF SHEFFIELD, ENGLAND

COORDINATOR, CERTIFICATION PROGRAM, OPERATIVE DENTISTRY, FEDERAL UNIVERSITY OF SANTA CATARINA, FLORIANOPOLIS, SANTA CATARINA, BRAZIL

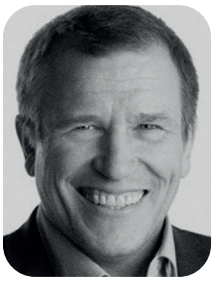
COORDINATOR, GRADUATE PROGRAM, MASTER OS SCIENCE, OPERATIVE DENTISTRY, FEDERAL UNIVERSITY OF SANTA CATARINA, FLORIANOPOLIS, SANTA CATARINA, BRAZIL

INTERNATIONAL LECTURER, MORE THAN 1000 LECTURES ALL OVER THE WORLD

AUTHOR OF 20 TEXT BOOKS

MORE THAN 100 ARTICLES IN SEVERAL LANGUAGES

EDITOR-IN-CHIEF, JOURNAL CLÍNICA - INTERNATIONAL JOURNAL OF BRAZILIAN DENTISTRY



IAN BUCKLE

GDC

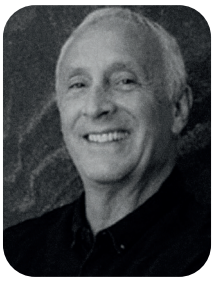
OCCLUSION FOR THE AESTHETIC DENTIST IN THE DIGITAL AGE

Technology is changing everything we do and dentistry is adapting to the new digital era. We have more information and data than ever and we need to try and understand how to use this information and blend it with the timeless principles that have helped us provide predictable solutions over the years. Face scanning, jaw tracking, digital occlusion, digital planning and smile design have all become simpler and more cost effective than ever but if we are not careful technology can just get us into trouble quicker. In this lecture Ian will introduce a new digital concept for diagnosing, planning and executing aesthetic cases predictably and efficiently.

Aims and objectives
· Understand the Concept of Complete Dentistry
· Understand how to use digital technology to aid the complete dentistry process and patient engagement
· Four occlusal goals and how to measure them digitally
· A novel approach to predictable treatment planning
· Develop a knowledge of digital workflows

CV
Liverpool born Ian qualified from Liverpool University in 1985. He has over 30 years experience in general practice both in the Private sector and with the National Health Service. He runs a Private Practice in the picturesque village of Thornton Hough on the Wirral concentrating on comprehensive reconstructive, aesthetic and implant dentistry.

Ian provides continuing education to dental professionals across Europe. He also lectures nationally and internationally on functional and aesthetic dentistry. He spends approximately two-thirds of his time in practice and the other third as an educator. He believes this balance keeps him on the leading edge of both disciplines.



VINCENT CELENZA

DMD

ARE IMPLANTS BETTER THAN TEETH?

Ever since the advent of osseointegrated implant fixtures in the early 80s from P.I. Branemark's famous work, to now, the use of implants in everyday dentistry has just grown and grown. Not a day goes by in my office that I don't do something utilizing this technology when treating my patients one way or another. But, is it always the best choice? Is it the best way to go to replace a missing tooth or teeth? Are there disadvantages?

This presentation will not be a "how to" course in the placement of implants. It is intended to be a discussion that hopes to develop thought patterns about when decisions to use implants are made and why. What are their superior offerings in a given situation and should we venture to restore teeth instead? Additionally, and maybe more importantly, we want to ask these questions: Are these teeth restorable? Would restoring be better? What's involved and would restoring be a heroic venture? Would that be reckless? What are my own limitations and abilities with regard to this and what about my patients participation in this process?

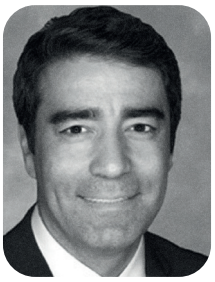
At the end of this presentation I hope there will be a slightly different view about when, where and how to best employ the use of implants in our dental practices as an adjunct to prosthetic treatment when restoration of teeth has been ruled out.

Learning Objective(s):
To put the use of dental implants into perspective.
To appreciate the long-term ramifications of dental implant restorations.
To gain an appreciation for prosthetic considerations necessary to restore implants.

CV
Diplomate of the American Board of Prosthodontics
Past President of the American Academy of Esthetic Dentistry
Fellow and Past President of the Northeastern Gnathological Society now renamed as: NGS Academy of Multidisciplinary Dentistry (NGS AMD).
Fellow of the Greater New York Academy of Prosthodontics
Fellow of the American College of Prosthodontics

1979 – Boston University school of Graduate Dentistry
Certificate Specialty – Prosthodontics
1977 – Fairleigh Dickinson University Dental School

Currently – Private Practice in Manhattan
Presents regularly at NYU, Columbia, and the Manhattan VA.



ZAFER ÇEHRELİ

DDS, PHD

RESIN INFILTRATION: ULTRACONSERVATIVE ESTHETIC SOLUTIONS FOR CARIOUS AND NON-CARIOUS ENAMEL LESIONS

Esthetic and restorative management of localized enamel defects presents a unique clinical challenge. Originally developed for the non-invasive treatment of incipient approximal carious lesions, the resin infiltration technique has become increasingly popular for the management of post-orthodontic white spots, localized hypomineralizations and even mild to moderate fluorosis. This presentation will review a wide spectrum clinical situations, where the infiltration concept can be implemented with high levels of success and esthetic outcomes. Current concepts and challenges of the resin infiltration technique will be discussed on variety of well-documented, step-by-step case presentations.

CV

Dr. Cehreli is professor of Pediatric Dentistry at Hacettepe University, Ankara, Turkey; where he has been for most of his career. He has published over 150 papers in peer-reviewed journals, has co-authored in several textbook chapters, and his publications have been cited extensively. He is the President-Elect of the International Association of Dental Traumatology (IADT) and has Chaired the Education Committee of the IADT for 6 years, during which he led the team that developed ToothSOS, the official app of the IADT. He is an active member of the American Academy of Pediatric Dentistry, International Academy of Paediatric Dentistry and International Association of Dental Research. Dr. Cehreli has received several national and international awards in research. His clinical and research interests include pediatric endodontics, dental traumatology and pediatric esthetic dentistry, and has lectured extensively on these topics in Europe, Americas and Asia and Africa.



KORAY FERAN

LCIAD, DR

GUIDED IMPLANT SURGERY AND PLACEMENT – CAN WE AFFORD NOT TO DO IT?

The increasing accuracy and fidelity of intraoral and CBCT scanners, planning software and 3D printers now allow a very predictable and convenient method for accurate and predictable placement of implants in almost any situation.

This presentation covers the experience of the adoption of a special guided implant surgery and placement protocol after more than 25 years of freehand implant placement. The lecture includes the significant advantages of this protocol in private practice in London and asks whether such predictability can now be achieved.

CV

Koray graduated from Guy's Dental Hospital in 1989, receiving the Final Year Award for overall excellence and the S.J. Kaye Oral Medicine and Pathology Award. He remained at Guy's for two separate areas of practice in Prosthodontics and Oral and Maxillofacial Surgery until 1991 when he started general practice in North London.

Between 1991 and 1993 he completed a Master's degree in Periodontology at Guy's Hospital and at the end of 1993 he passed the exams for the Restorative Dentistry Fellowship in Dental Surgery from the Royal College of Surgeons, UK.

Since then he has been committed to quality in dental treatment and has a special interest in multidisciplinary cases that require detailed planning and coordination of various branches of dentistry. Between 1996 and 1999 he provided surgical services in periodontology and implant dentistry to three prestigious practices in Knightsbridge and South Kensington and from 1998 he established his own practice in London's West End.

In 2005 he established the London Center for Implant and Cosmetic Dentistry (LCIAD Ltd.) on Wimpole Street in the heart of London's dental and medical community. He expanded LCIAD in October 2010 with new and larger facilities to create a strong, multi-disciplinary clinical team with in-depth experience in the management and care of patients with complex dental problems.

Koray is recognized among his colleagues as a trusted and highly competent clinician in the care of patients with multidisciplinary treatment needs and accepts referrals for patients from over 70 colleagues. He is recognized for his successful multidisciplinary approach in dealing with complex cases requiring specialized surgical and restorative branches of dentistry, especially those cases that have failed in previous dental work.

Koray has undertaken and continues to undertake extensive postgraduate training in many countries with world leaders in many areas of dentistry and technology and is also a sought after lecturer in his own right, approved, private practice in the provision of quality dental care including fee setting, consultation and treatment planning, occlusion, dental photography, surgical and restorative implant dentistry including guided surgery, all aspects of restorative dentistry, provision of financial and commercial aspects including bone and tissue augmentation and sinus grafting.

He currently holds or has held the following positions:

Clinical Director and lead clinician at the London Center for Implant and Cosmetic Dentistry (LCIAD Ltd.) 2005 - present

- Megagen AnyRidge implant system trainer 2014 - present
- Active Member of the European Academy of Aesthetic/Esthetic Dentistry (EAED) 2015
- Member of the Pierre Fauchard Academy 2018 - present
- Slow Dentistry Ambassador 2018 - present
- MINEC UK Chairman 2018 - present
- Member of the International College of Dentists (ICD) 2019 - present
- College of General Dentistry (CGDent) Fellow 2022 - present
- Member of International Congress of Oral Implantologists (ICOI)
- Member of European Association for Osseointegration (EAO)
- Simple Steps (previously Simply Excellence) comprehensive dental implantology Annual Course Lecturer and mentor 2004 - 2016
- Keynote Speaker in the UK and Europe for Ankylos Dental Implant System (Dentsply Implants, Germany) 2005 - 2013
- British Academy of Aesthetic Dentistry (BAAD) Treasurer and Executive Committee Member 2006 - 2015 and President 2012 - 2014
- Secretary of the London Dental Fellowship (LDF) Program 2006 - 2009 and then Chair 2010 - 2011
- Guest Lecturer on Multi-System Implant Course, Trafford General Hospital, Manchester 2006 to 2011 and 2016 to 2017
- Dental Implant Summaries 2007 - 2010 and Implant Dentistry editorial team 2007 – 2013
- LCIAD Course Leader and Assistant Lecturer | Academy Sinus and Bone Augmentation Applied Cadaver Course 2008
- Implant Program Lecturer, University of Salford Implant Master's Degree 2008 - 2012
- Association of Dental Implantology (ADI) UK London Committee Member 2009 - 2013 and ADI advisor for dental implantology.
- Instructor and co-author of ADI's UK e-learning course on treatment planning (ARK) launched in September 2010
- Dentsply Implants PEERS Group Member 2012 - 2014
- Member of Scandinavian Academy for Aesthetic / Esthetic Dentistry (SAED) 2014 - 2020
- Edge Hill MSc in Dental Implantology Guest Lecturer (2015 - 2018)



MAGDA MENSI

PROF.SSA

BEAUTY AND BIOLOGY: SUCCESS PREVISION FAILURE PREVENTION

During the lecture we will answer 4 questions of interest about implants in the esthetics area from different points of view: Periodontal. surgery, prosthodontic, esthetic, maintenance.

Definition, diagnosis and risk factors of biological complications
Surgical and prosthodontics roles to obtain the success in the esthetics area
Tools and protocols for maintenance and treatment of biological complications
Management of peri-implant soft and hard tissues deficiencies
The aim is to give clear and evidence based protocols of modern implantology to get the success and prevent the failure in a long term follow up.

CV

Prof. Magda Mensi University of Brescia School of Dentistry Periodontology and Oral Surgery Department

Education and training:

2000: Honors degree in Dentistry;
2006: Practical and theoretical course of mucogingival surgery, Professor De Sanctis;
2010-2012: Advanced Course of Periodontal Surgery and Implantology in periodontally compromised patients, Professor Trombelli, University of Ferrara;
2013: Stage EU Young researchers, CEERNT Bruxelles, European community fund raising
2015: Visiting Professor presso Ohio State University-Columbus USA Working experience:

Working experience:
From 2001: Private activity as a periodontist (surgical and non-surgical therapy and implantology); • From 2001: SIdP Ordinary Member;
From 2002: Associated Researcher in Oral Surgery and Periodontology (periodontitis, periimplantitis, topical antibiotics, maxillary mycetomas, bisphosphonate-induced osteonecrosis, low abrasion powders) at Dental Clinic, Spedali Civili di Brescia;
From 2002: I° Level Medical Director at Oral Surgery and Periodontology department on patients with systemic pathologies belonging to the current LEA at Dental Clinic, Spedali Civili di Brescia;
From 2002: Didactic activity as Adjunct Professor of Oral Surgery, Implantology, Periodontology and Home Oral Hygiene, University of Brescia;
2015-2017: Teacher at Master of Periodontology, University of La Sapienza, Roma;
2016/2017: Teacher at Master of Dental Hygiene, Istituto Stomatologico Toscano;
2017/2018: Teacher at Master of Implantology, University of Padova;
2017/2018: Teacher at Dental Hygiene Master, University of Brescia;
2019/2020: Teacher at the II Level Master of Clinical and Microsurgical Endodontics, University of Brescia;
From 2021: ITI Ordinary Member;
From 2013: speaker at national and international Courses and congresses Reviewer:

Refereeing
International Journal of Dentistry and Oral Health, 2018;
Journal of Dentistry, Oral Disorders & Therapy, 2018;
Quintessenza Internazionale, 2020. Publications:

Publications

In vitro study of amalgam corrosion. C. Paganelli, S. Salgarello, M. Mensi P. Fontana, L. Visconti, P.L. Sapelli. La Medicina del Lavoro 2002; 93 (3): 286-9. Med Lav. 2002 MayJun;93(3):286-9. Italian; • Sinusiti micotiche: aspetti epidemiologici ed eziopatogenetici. P. Orza, G. Pinsi, A. Caruso, M. Mensi, S. Salgarello, P. Nicolai, M. Berlucchi, D. Tomenzoli, N. Manca. Bollettino di microbiologia e indagini di laboratorio news 2002; 1: 5-12;

Mycetoma of the Maxillary sinus: Endodontic and Microbiological Correlations. M. Mensi, S. Salgarello, G. Pinsi, M. Piccioni. Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontics 2004;98:119-23;

Efficacia dell'anestesia intraossea in endodonzia: trial clinico randomizzato. R. Boninsegna, M. Mensi, G. Venturi, S. Gaffuri, S. Salgarello. Giornale Italiano di Endodonzia 2004; 18 (2): 75-9;

Histochemical and immunohistochemical evaluation of gingival collagen and metalloproteinases in peri-implantitis. E. Borsani, S. Salgarello, M. Mensi, R. Boninsegna, A. Stacchiotti, P.L. Sapelli, R. Bianchi, L. Rodella Acta Histochemica 2005; 107: 231-240;

Risk of maxillary fungus ball in patients with endodontic treatment on maxillary teeth: a case- control study. M. Mensi, M. Piccioni, F. Marsili, P. Nicolai, P.L. Sapelli, N. Latronico. Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontics 2007 Mar; 103 (3): 433-6;

Altered immunolocalization of heat-shock proteins in human peri-implant gingiva. Borsani E, Salgarello S, Stacchiotti A, Mensi M, Boninsegna R, Ricci F, Zanotti L, Rezzani R, Sapelli P, Bianchi R, Rodella LF. Acta Histochem. 2007;109(3):221-7;

Fungus ball of the paranasal sinuses: experiences in 160 patients treated with endoscopic surgery. Nicolai P, Lombardi D, Tomenzoli D, Villaret AB, Piccioni M, Mensi M, Maroldi R. Laryngoscope 2009 Nov, 119 (11): 2275-9;

Utilizzo di metronidazolo topico nel trattamento di siti con parodontite severa e periimplantite. Mensi M. Dental Trybune Italian Edition Novembre 2013;13-16;

Efficacia della Full Mouth Instrumentation in terapia antibiotica combinata nel trattamento della parodontite aggressiva generalizzata. Mensi M, Scotti E. Hygiene Tribune Italian Edition - Aprile 2014; 20-22;

Aggressive periodontitis: a simple genetic test to prevent the disease. Case control study. Mensi M, Scotti E, Maffezzoni E, Baronio M, Lougaris V, Salgarello S. Minerva Stomatologica Volume 63 Supplemento 1 al N. 4 (Aprile 2014)-463;

AQP1 expression in human gingiva and its correlation with periodontal and peri-implant tissue alterations. Buffoli B, Dalessandri M, Favero G, Mensi M, Dalessandri D, Di Rosario F, Stacchi C, Rezzani R, Salgarello S, Rodella LF. Acta Histochem. 2014;

Le tecnologie a basso impatto biologico e l'utilizzo di monconi estetici nella riabilitazione implantare del paziente parodontalmente compromesso. M. Mensi Implantologia 3/2014 Sett; 79-85;

Maxillary Fungus Ball: Zinc-oxide endodontic materials as a risk factor. P Nicolai, M Mensi, F Marsili, M Piccioni, S Salgarello, E Gilberti, P Apostoli. Acta Otorhinolaryngologica Italica 2015;35:93-96. Acta Otorhinolaryngologica Italica official Journal of the Italian ENT Society (ISSN 0392-100X);

Effectiveness of local antibiotic in the treatment of acute periodontal lesion. M.Mensi, E. Scotti. Minerva Stomatologica vol. 64-suppl1 n2 pag. 161;

I biomateriali eterologhi nella riabilitazione implantare del seno mascellare atrofico. Rapporti istologici a 5 mesi. A.F. Palermo, M.Mensi Implantologia 2015 Mar-59-63;

La riabilitazione completa dei mascellari e l'impiego combinato dei biomateriali nella gestione dei volumi implantari. S.Rosi, M.Mensi, B. Buffoli. Quintessenza Internazionale&JOMI 2015 Gen-39-43;

Full Mouth-Erythritol Powder Air Polishing Therapy: Paradigm Shift. Il nuovo modo di concepire la terapia. M. Mensi, E. Scotti, A. Sordillo. Quintessenza International& JOMI Vol 1 2016;

Doxiciclina topica nel trattamento non chirurgico della perimplantite. M. Mensi et al. Italian Dental Journal gennaio 2016,

Terapia parodontale non chirurgica: ieri, oggi e domani. M.Mensi. Quintessenza International&JOMI Vol 2 2016;

Passato, presente e futuro dei coadiuvanti locali e sistemici nel trattamento non chirurgico di perimplantiti e parodontiti: indicazioni e limiti. M. Mensi et al. Dental Cadmos, 3 2016;

Clinical results of a control released doxycycline system combined with a new non surgical approach in peri-implant pockets. One year follow-up. M. Mensi, E. Scotti, T. Brunelli, S. Calza. Minerva Stomatologiaca Vol 65 N°3 2016;

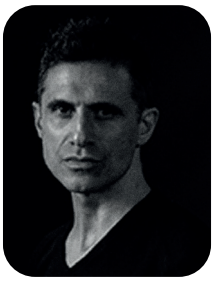
One stage treatment of multiple recessions in the aesthetic area with the bilaminar technique: clinical procedures and 24-month follow up. M. Mensi, E. Scotti, S. Salgarello, A. Cerutti. The International Journal of Aesthetic Dentistry Vol.11 4/2016;

La doxiciclina topica, come, quando e perché. Mensi M., Guarnelli M.E., Pilloni A. Dentista Moderno Vol. 2016;

Una nuova metodica di rimozione del biofilm con polvere di eritritolo guidata da rilevatore di placca. Mensi M., Sordillo A., Dalè M. Dental Cadmos, Vol 2 - 2017;

Periimplantitis: von der Diagnose zur Therapie Ein neues Behandlungsprotokoll mit Pulverstrahlsystemen. Mensi M. PLAQUE N CARE 11, 2, 70-79 (2017);

Full-Mouth-Erythritol-Pulver- Air-Polishing-Therapie (FM-EPAPT) – ein Paradigmenwechsel. M Mensi, E Scotti, A Sordillo, G Garzetti, S Calza. Prophylaxe Impuls 21. Jahrgang, 70-79, 2017;
Riabilitazione implantoprotesica dell'incisivo laterale con impianto NeO narrow postestrattivo in cresta alveolare atrofica: case report. Mensi M., Brunelli T. Q&JOMI Vol 4 - 35-40 – 2017;
Rivista giapponese con titolo in giapponese. Mensi et giapponesi. The Quintessence. Vol 36, n. 12/17-2619;
A new multiple anti-infective non-surgical therapy in the treatment of peri-implantitis: a case series. M Mensi, E Scotti, S Calza, A Pilloni, MG. Grusovin, C Mongardini. Minerva Stomatologica, 2017;
Utilizzo della terapia fotodinamica in pazienti diabetici con parodontite cronica: studio pilota. E.Scotti, S.Calza, M.Mensi. Quintessenza Int&JOMI, numero 1 volume 34 / 2018 pag 12-17;
L'utilizzo degli antibiotici in terapia parodontale e peri-implantare: evidenze scientifiche o consuetudine? Analisi dei risultati di un sondaggio condotto su un campione di dentisti italiani. M.Giargia, E.Scotti, S.Marchetti, M.Mensi. Dental Cadmos numero 3 volume 86 pagg. 204-212, 2018; • Biofilm Removal and Bacterial Re-Colonization Inhibition of a Novel Erythritol/ Chlorhexidine. AirPolishing Powder on Titanium Disks. M Mensi, A Cochis, A Sordillo, F Uberti, L Rimondini. Materials 2018, 11, 1510; doi:10.3390;
Periodontitis Stage III–IV, Grade C and Correlated Factors: A Histomorphometric Study. Buffoli, Garzetti, Calza, Scotti, Borsani, Cappa, Rimondini, Mensi. Biomedicines (Special issue: Malignant and potentially malignant disorders of the oral cavity: updates from pathogenesis to therapy) 2019, 7(2), 43;
Sbiancamento professionale alla poltrona e combinato: case series. Mensi, Salodini, Marchetti, Agosti, Scotti. Supplemento 2 di Dental Tribune Italian Edition anno XV n. 5, maggio 2019;
Clinical efficacy of Lactobacillus Reuteri containing lozenges in the supportive therapy of Generalized Severe and Advanced Periodontitis: one year results of a double blind randomized placebo-controlled pilot study. GM Gabriella, S Bossini, S Calza, V Cappa, G Garzetti, E Scotti, EF Gherlone, M Mensi. Clinical Oral Investigation, ottobre 2019;
One-Stage Full Mouth Instrumentation (OSFMI): clinical outcomes of an innovative and minimally-invasive protocol for the treatment of severe periodontitis. Mensi, Feres, Calza, Sordillo, Scotti, Garzetti. Journal of the International Academy of Periodontology 2020 22/0: 1-8, giugno 2020;
Plaque disclosing agent as a guide for professional biofilm removal: a randomized controlled clinical trial. Mensi, Scotti, Sordillo, Agosti, Calza. International Journal of Dental Hygiene 2020; 00:1–10. Comparison between four different implant surface debridement methods: an in vitro experimental study. Mensi, Viviani, Agosti, Scotti, Garzetti, Calza. Minerva Stomatologica 2020 October; 69(5):286-94;
Xenogeneic dermal matrix versus autologous connective tissue graft Versus no graft at abutment connection for improving aesthetics: 6-month outcomes of a randomised controlled trial. Baldi, Buti, Mensi, Alfonsi, Cinquini, Tonelli, Barone. Clinical trial in dentistry, feb 2020;
Oral care and quality evaluation: a multicentric study on periodontal treatment. Graziani at all (Mensi) Oral health & Preventive dentistry 2020; 18 363- 372;
Efficacy of the additional use of subgingival air-polishing with erythritol powder in the treatment of periodontitis patients: a randomized controlled clinical trial. Mensi, Scotti, Sordillo, Calza, Guarnelli, Fabbri, Farina, Trombelli. Clinical Oral Investigation 6/1/2021 https://doi.org/10.1007/s00784-020-03648-z;
MRONJ: comparison between two surgical approaches Mensi, Audino, Scotti, Zanola, Bettinsoli, Visconti, Negrini, Salgarello. Dental Cadmos 2/2021 vol 89 issue 2 pag 130-EOA;
Efficacy of sonic vs manual toothbrushing after professional mechanical plaque removal: a 6-months randomized clinical trial. Mensi, Scotti, Sordillo, Brognoli, Dominici, Calza.Int J Dent Hyg. 2020 Aug;18(3):285-294. doi: 10.1111/idh.12442;
Clinical evaluation of air polishing with erythritol powder followed by ultrasonic calculus removal versus conventional ultrasonic debridement and rubber cup polishing for the treatment of gingivitis: A split-mouth randomized controlled clinical trial. Mensi, Scotti, Sordillo, Dalè, Calza International Journal of Dental Hygiene 2021; 2021;00:1–10. DOI:



DIEGO LOPS

DDS, PHD

BEAUTY AND BIOLOGY: SUCCESS PREVISION FAILURE PREVENTION

During the lecture we will answer 4 questions of interest about implants in the esthetics area from different points of view: Periodontal. surgery, prosthodontic, esthetic, maintenance.

Definition, diagnosis and risk factors of biological complications
Surgical and prosthodontics roles to obtain the success in the esthetics area
Tools and protocols for maintenance and treatment of biological complications
Management of peri-implant soft and hard tissues deficiencies
The aim is to give clear and evidence based protocols of modern implantology to get the success and prevent the failure in a long term follow up.

CV

-2001: Doctor in Dentistry: vote 110/110.
-From 2001: Teacher and Tutor Department of Implatology.. St.Paul Hospital. Dental Clinic. University of Milan, Italy.
-From 2003 Scientific Reviewer for Quintessence Publishing Co. Inc. (Chicago, IL).
-2004 Post-graduated on "Advanced oral surgery and maxillary reconstructive technics" at University of Paris - Paris VII. -2004: Master in "innovation technics in oral implantology and prosthetic rehabilitation" at University of Milan, Italy.
-From 2006: Teacher at Post-graduate Implant Dentistry Course, St.Paul Hospital, Dental Clinic, University of Milan, Italy.
-2008 Phd on Implant Dentistry and Prosthetic Rehabilitation at University of Milan, Italy.
-From 2009: Teacher at Post-graduate implant Dentistry and Rehabilitation. Dental Clinic. University of Padova, Italy.
-2011: Winner of the IIS International Prize for the Best Clinical Research of the 2011.
-ITI (International Team for Implantology Fellow Member.
-IAO Active Member Italian Academy of Ossseointegration).
-PEERS Platform for Exchange. Education, Research Science Active Member
-From 2013: Abilitation for Associate Professor for the Italian Ministry of University.
-From 2016: Associate Visiting Professor for the Shangai (China) Jiao Tong University.
-From 2018: Assistant Professor at University of Milan, Italy.
-Author of 53 Publications on international peer-reviewed journals



ROBERT ORETTI

DDS

CREATING THE OPTIMAL SOFT TISSUE ATTACHMENT AND VOLUME AROUND DENTAL IMPLANTS – THE KEY TO LONG TERM SUCCESS

The ultimate goal in implantology is to create a harmonious aesthetic outcome around dental implants that mimics the surrounding dentition and soft-tissue condition and which can be maintained for the long term.

A mucosal seal ("transmucosal attachment") is required to prevent bacteria and bacterial products reaching the bone, thus safeguarding the osteointegration of the implant. This concept is at the base of modern implant dentistry

This presentation will discuss the critical factors and the step by step surgical protocols associated with developing an adequate transmucosal tunnel around dental implants for optimal volume and attachment.

Additionally, when the volume of soft tissue is inadequate, or there is no keratinized tissue remaining, this presentation will show procedures to correct these deficiencies with soft tissue manoeuvres and connective tissue grafts for enhanced outcomes on a predictable basis.

Educational Aims and Objectives :

To be familiar with the anatomical landmarks and compartments such as the mucogingival junction and attached and non-attached gingivae.

To appreciate the rationale of biological width and the formation of a transmucosal tunnel around dental implants and the strategies required to enhance the soft tissue tunnel.

To understand how to harvest soft tissue grafts and their application to improve the formation of keratinized and attached soft tissue.

CV

Robert qualified at Kings College, London in 1987. After working in an orthodontic practice in Colchester for four years he moved to Newbury, Berkshire.

Rob then spent the next 14 years working in a busy private practice where he built a reputation for treating complex cases involving cosmetic, implant and orthodontic treatments. At this time, Rob also became involved in teaching and mentoring and has taught many dentists on all aspects of cosmetic and dental implant therapies.

In 2006, Rob moved to Pentangle Dental Transformations – a purpose built centre for dentists to send their patients for implant and complex treatments. Rob now spends his time between treating these referred patients and teaching.

Rob is a post graduate tutor for the Thames valley deanery, a mentor and faculty educator for the ADI (Association of Dental Implantology), a fellow and international speaker for the ITI (International team of Implantologists), a Royal College of Surgeons examiner for the implant diploma (RCS Edin) and the Membership in Advanced General Dental Surgery (MAGDS RCS Edin) and was the president of BAAD (British Academy of Aesthetic Dentistry) 2018-2020

He presents regularly at scientific meetings and has published several articles on implant therapy.



STAVROS PELEKANOS

DDS

DESIGNING THE FULL MOUTH IMPLANT REHABILITATION – FROM FP1 TO FP3

Treatment planning with implants in full arch edentulous cases is always challenging in implant dentistry. Although prosthetically driven implant placement started being implemented the last 2 decades, implant placement became more accurate with the use of Digital technology and guided implant surgery.

The advancements of materials like Zirconia, CAD software's, face scanners and CAM procedures have simplified the treatment workflow resulting in more predictable results with significantly less complications.

This presentation will focus on the treatment methodology of terminal dentition and edentulous cases with implants. Alignment procedures, CAD design, surgical and prosthetic guide stents and clinical procedures will be presented step by step. Furthermore, different options of the final restoration will be discussed in terms of CAM design and material choice.

Learning objectives:
- Understand the rationale of different treatment modalities (fixed vs removable vs "retrievable"
- Differentiate between FP1, FP2 and FP3 full arch implant restorations and adjust implant positions
- Simplify guided implant placement procedures
- Learn the "PROSTHETIC GUIDE" for immediate loading
- Get acquainted with different techniques and material options for the final restoration

CV

Dr. Stavros Pelekanos received his undergraduate degree in Dentistry (D.D.S.) from the University of Athens, Greece. In 1993, he obtained his doctoral degree in Prosthodontics (Dr med dent) from the University of Freiburg (Prof. Dr. J.R. Strub), Germany. Following his professional training, Dr. Pelekanos established a private practice in Athens, oriented towards prosthodontics, implantology and esthetic dentistry.

In 2002, he was appointed full-time Lecturer at the Department of Prosthodontics, Dental School, University of Athens, Greece, and in 2012 Assistant Professor in the same department. Since 2013 he is an active member of the European Academy of Esthetic Dentistry (EAED). His professional affiliations include: The International College of Prosthodontics (ICP), European Prosthodontic Association (EPA), Greek Prosthodontic Association and many others. He is a faculty member of gIDE Institute (Global Institute of Dental Education, Los Angeles, California) and Dental Tribune (CME courses) lecturing internationally and performing hands on courses on implants, aesthetics and restorative procedures.

In 2008 and 2011, Dr. Pelekanos received second and first prize at the scientific award competition of the European Academy of Esthetic Dentistry held in Madrid, Spain and Istanbul, Turkey respectively. To date he has published over twenty articles in peer reviewed journals and 3 chapters in books.



JOSE MANUEL REUSS

DDS

FACIALLY GUIDED IMPLANT REHABILITATIONS

Prosthetically driven implant dentistry is an essential concept for successful rehabilitations. In particular, the patient's face is the key reference for a correct planning and treatment execution. Digital protocols such as facial scanning have dramatically changed the way we approach a patient, mostly in terms of efficiency in the treatment planning face, as well as in order to achieve that holy grail of consistency between the initial wax-up and the final result. A detailed prosthetic design as well as a proper material selection are also part of the crucial initial phases of a treatment development.

CV

Graduate in Dentistry by the Complutense University of Madrid (UCM), 2010
Postgraduate in Surgical Implant Dentistry, University of California at Los Angeles (UCLA), 2014
Master of Sciences (MS), UCM, 2020
Collaborating Professor, Department of Postgraduate Prosthodontics, UCM
Recipient of the Grant of the American Academy of Implant Dentistry for preclinical and clinical research, 2013
2nd Place at the American Academy of Implant Dentistry meeting Research Contest, Orlando, U.S.A, 2014
Founder, Left Pocket Association
Affiliate Member of the European Academy of Esthetic Dentistry
Member of the Academy of Osseointegration
Member of the Spanish Society of Prosthodontics
Member of the Spanish Society of Periodontics
Main Focus: Digital Implant Dentistry and Oral Rehabilitation



FINLAY SUTTON

DDS

GETTING THE TEETH IN THE RIGHT PLACE WITH BEAUTIFUL DENTURES. THE IMPORTANT DIAGNOSTIC STEP BEFORE DENTAL IMPLANT PROVISION.

When restoring edentulous patients with fixed implant supported restorations it is essential to know exactly where the artificial teeth are to be positioned before implant placement. Finlay will show how he delivers life like dentures with superb function. This being the foundation for optimal implant positioning. The lecture will be practical and clinically useful; abundantly illustrated with photographs and videos of Finlay's techniques. In addition, this presentation is aimed at igniting enthusiasm and love for dentures, showing how we can change our patients' lives with beautifully made prostheses.

CV

I am based in the Northwest of England, UK, limiting my clinical work to removable prosthodontics. Together with my highly skilled dental technician, Rowan Garstang, working in the room next door, we provide patients with superbly functioning and life-like dentures – profoundly improving their quality of life.

I love teaching dental professionals how to provide state of the art dentures, aiming to ignite enthusiasm and love for removable prosthodontics.

I qualified in 1993 and spent 6 years in general practice, during this time I found prosthodontics difficult and unpredictable. This led me to leave general dental practice and gain a further 7 years formal training in prosthodontics and restorative dentistry at Manchester and Liverpool dental hospitals prior to establishing my specialist referral practice in 2007.

I concentrate my professional life within three areas of removable prosthodontics, namely, 1. clinical provision for patients, 2. training/lecturing/mentorship for dental professionals, 3. research and development.

Dr Finlay Sutton
Specialist in Restorative Dentistry, Prosthodontics, Endodontics and Periodontics
BDS, DGDP (UK), MSc, MFDS RCS Ed, MRD RCS Ed, PhD, FDS (Rest Dent) RCS Ed, FCGDent

ORAL PRESENTATIONS

OP-01

EVALUATING LASER EXPOSURE OF MAXILLARY IMPACTED CANINES IN ORTHODONTIC PATIENTS

Moegamat Shaheed BABOO
Member of the South African Dental Association
Member of the South African Society of Periodontology, implantology and oral medicine
Member of the International Laser Society
Member of the World Academy of Laser Education Dentistry
Member of the International Team of Implantologists

BACKGROUND: The impacted maxillary canine presents a unique challenge in clinical practice. Firstly, it requires adequate space creation during orthodontic treatment. Secondly, the impacted maxillary canine must be surgically exposed to facilitate orthodontic traction. Surgical exposure is traditionally performed by employing one of two techniques: the open technique and the closed technique, using either the surgical motor unit or piezo-electrical unit. This study aims to use the 940nm laser in the open technique and the 2780nm laser in the closed technique. This novel approach to exposing the impacted maxillary canine provides a unique opportunity to measure patients perceptions of pain postoperatively, in four phases, and to measure the time taken to complete the procedure. Materials and methods

Twenty-three patients from a patient pool of 416 presented with impacted canines. Twelve patients had their canines exposed with the open technique, using a 940nm laser; while 11 patients had their canines exposed with the closed technique, using a 2780nm laser.

RESULTS: The mean pain readings using the Numerical Rating Scale (NRS) for the 940nm laser were 2.50 (as the anaesthetic wore off), 2.42 (on the first day), 0.58 (on the third day) and 0.08 on the seventh day. The mean pain readings using the NRS for the 2780nm laser were 4.09 (as the anaesthetic wore off), 4.00 (on the first day), 1.73 (on the third day) and 0.18 on the seventh day. The open technique using a 940nm laser takes 16 minutes to complete, while the closed technique using a 2780nm laser takes 30 minutes to complete.

CONCLUSION: Chronologically there is an exponential decline in pain experienced by patients with the use of lasers, and outcomes were favourable, as no attachments were lost postoperatively. The time taken to complete the procedures proved to be adequate in terms of time management.

KEYWORDS: Laser, canines, exposure.

OP-02 (WITHDRAWN)

OP-03

EVALUATION OF SURFACE WEAR OF VARIOUS TEMPORARY CROWN MATERIALS

Merve BENLİ
Merve Benli, Department of Oral Rehabilitation, Medical University of South Carolina, Charleston, SC, USA

AIM: The aim of this study is to compare the surface wear behavior of three different provisional restorative materials.

METHOD: The study consists of three groups (group Pe: Polyethyl methacrylate (Bosworth Trim II, Ultimate Dental, Cordova, Tennessee, USA); group PM: PolyMethyl methacrylate (Bosworth Trim II, Ultimate Dental, Cordova, Tennessee, ABD), group BIS: Bis-acryl composite resin (ExperTemp, Ultradent, South Jordan, Utah, USA)) and a total of 54 samples (n = 18). A chewing simulator was used for the wear test and the samples were subjected of 10.000, 20.000 and 30.000 cycles (5-55°C, thermocycling). Non-contact optical profilometer was used to determine the amount of wear on the sample surfaces. Shapiro-Wilk, two-way analysis of variance and Tukey tests and Univariate method were used in the statistical analysis of the data ($p < 0.05$).

RESULTS: According to the data obtained, the amount of wear makes a significant difference between the groups ($p < 0.001$). While the highest average wear value was in PE group (186.2 (39.34) µm), the lowest average value was obtained in BIS group (92.82 (10.79) µm). It was determined that the number of chewing cycles also affected the amount of wear ($p < 0.001$), the average facet depths of all groups were 112.64 (22.77) µm at 10.000 cycles, 149 (47.05) µm at 20.000 cycles, and 170.76 (48.93) µm at 30.000 cycles.

CONCLUSION: Regarding the parameters evaluated in the study, BIS shows more wear resistance than PM and PE. Thus, while BIS material is recommended for long-term provisional restoration use, PM or PE materials can be applied in short-term clinical needs.

KEYWORDS: Bis-acryl composite resin, provisional restoration, wear resistance.

OP-04

EVALUATION OF MONOMER RELEASE OF ORTHODONTICALLY USED CLEAR ALIGNERS

Ataberk KAYHAN[1], Bora BİREN[1], Merve KURNAZ[1], Gökhan BİÇİM[2], Yegane GÜVEN[2]
[1]Department of Orthodontics, Istanbul Kent University, Istanbul, Turkey
[2]Department of Basic Medical Sciences Biochemistry, Istanbul Kent University, Istanbul, Turkey

AIM: The aim of this study is to comparatively evaluate different polymers in terms of releasing monomers and evaluating which material has higher monomer release.

MATERIALS-METHODS: In this study, samples from 3 different clear aligner companies (SmartTrack, ClearQuartz, Duran) and 1 acrylic block were used. The materials were cut into small sections and reacted with Potassium Permangate (KMnO4), which is a strong oxidant. To elaborate the evaluation, KMnO4 solutions were prepared in 6 different concentrations (1.24 mM; 0.62 mM; 0.31 mM; 0.16 mM; 0.08 mM; 0.04 mM). The amount of color lightening was evaluated spectrophotometrically for periods of 1 hour, 4 hours and 24 hours, and it was determined that there was a correlation between the amount of monomer dissolved from the aligners and the amount of color lightening.

RESULTS: In the standard graph, the R2 value was found to be 0.99. The amount of substance separated from the plaques and oxidized by KMnO4 was calculated in mM. It has been determined that monomer release is seen in all samples (Acyrilic Block 0.0723mM, ClearQuartz 0.0826mM, Duran 0,0584mM, SmartTrack 0,0271mM); However, the monomer release rate varied among the samples. According to this; The amount of substance separated from the aligners in KMnO4 at 1 mM concentration was determined mostly in sample no.2 (ClearQuartz, 0.0826 mM) at 24th hour.

CONCLUSION: The amount of substance separated from the transparent plates was determined mostly in sample no.2 (ClearQuartz, 0.0826 mM) at 24th hour. In this part of the study, the amounts of monomers separated from the materials were tested quantitatively. The method is quantitative and can be used as a method to determine the release amount of polymers. In the next stage, it is aimed to determine the quality and structure of the substance separated from the polymer with more sensitive methods.

KEYWORDS: Clear aligners, monomer, potassium permanganate, polymer release.

OP-05

INTERDISCIPLINARY THERAPY IN A YOUNG PATIENT DIAGNOSED WITH REGIONAL ODONTODYSPLASIA

Jan STIBAL, Ivo MAREK, Michal NOVOSAD
Private Dental Clinic Stomma

OBJECTIVE: Regional odontodysplasia is a rare disorder of tooth development that affects a specific area of the dentition. It is characterized by abnormalities in the development of enamel, dentin, and pulp, leading to disruptions in tooth formation and eruption. On X-rays, the affected teeth exhibit reduced opacity and are often described as "ghost teeth."

CASE REPORT: A twelve-year-old girl diagnosed with regional odontodysplasia and resulting retention of teeth 15, 14, 13, 12, 11, and semiretention of tooth 21 and 16 presented to our clinic.

A complex aspect of treating these cases involves determining an optimal treatment plan, which typically involves interdisciplinary collaboration between an orthodontist, surgeon, and prosthodontist. Due to the patient's young age, alternatives to implant treatment must be considered. In this case, replacement of the missing teeth was accomplished using autotransplantation of teeth.

The patient had the following treatment plan established and subsequently executed:

1. Extraction of retained teeth
2. Placement of fixed orthodontic appliance
3. Autotransplantation of teeth 35 and 45 to positions 11 and 13
4. Surgical exposure of teeth 16 and 21 followed by orthodontic extrusion
5. Autotransplantation of tooth 25 to position 12
6. Completion of orthodontic therapy
7. Prosthetic reconstruction involving minimally invasive ceramic veneers in the range of positions 13-23 and zirconia crown with a mesial cantilever on tooth 16 in position 15

CONCLUSION: By utilizing the procedures offered through interdisciplinary collaboration and by appropriately timing the treatment, we are able to reconstruct dentition in even exceptionally complicated and complex cases among adolescents and young adults. This approach not only limits the social and societal handicap posed by missing teeth but also provides a permanent, functional, and biologically optimal solution.

KEYWORDS: Autotransplantation, interdisciplinary therapy, regional odontodysplasia.

OP-06

3D FACIAL DATA INTEGRATION APPLIED TO DIRECT RESIN COMPOSITE RESTORATIONS

Hitoshi MİKİ[1], Kosuke KASHİWAGİ[2], Risa SHİMAMORİ[2], Junko TANAKA[2]
[1]Habara Dental Clinic, Osaka,Japan, Department of Fixed Prosthodontics and Occlusion, Osaka Dental University, Osaka,Japan[2] Department of Fixed Prosthodontics and Occlusion, Osaka Dental University, Osaka,Japan

BACKGROUND : It is very important to harmonize not only the tooth morphology and shade but also the dentition and facial appearance in the esthetic restoration of the maxillary anterior teeth. We report a case of esthetic improvement by digital noninvasive esthetic analysis based on the integration of face scan data and intraoral scan data in a 30-year-old female patient who with a chief complaint of esthetic disorders of the maxillary anterior teeth after completion of orthodontic treatment.

CASE: Digital simulation analysis for the predicted amount of thickness of the filling material led to the esthetic and minimally invasive conscious and the development of a treatment plan applying direct composite resin restorations without natural teeth preparation. Direct veneer restorations were applied to diastema closure for both endodontically treated discolored maxillary right central incisor and the lateral incisor with a defective filling, and also restoration of dental abrasion on the incisal edge lesion of left central incisor.

The gingival contour and proximal contact can be improved to achieve with using pate silicone index(Imprinsis/TOKUYAMA) to be formed outline of incisors and clear matrix (Adaptonal sectional matrix/Kerr) for ideal adjacent surface morphology and diastema closure, and also the clear silicone index(Exaclear/GC) can be replaced intraorally to be injected and light cured for final labial morphology using an flowable resin composite (ES universal low flow: U, UW/Kraray)with IMT(Injection Moulding Technique), were fabricated on a 3D printed model.

RESULTS: Preoperative digital simulation was well performed based on non-invasive esthetic analysis by integrating digital information on the face using a face scanner (Plane Finder, Face Hunter/Zirkonzahn） and dentition status using IOS(i700/Medit), and modified IMT for the chief complaint of esthetic disorder to the maxillary anterior teeth resulted in a minimally invasive direct restorations with a high degree of patient satisfaction and esthetic improvement.

KEYWORDS: 3D Data integration, face scan, IOS, direct resin composite restoration, injection moulding technique, maxillary anterior esthetic.

OP-07

PROSTHODONTIC TREATMENT USING MILLED-BAR WITH REMAINING IMPLANTS AFTER PERI-IMPLANTITIS

Jin Seon KWON, Chang Mo JEONG, Mi Jung YUN, So Hyoun LEE, Jung Bo HUH
Department of Prothodontics, School of dentistry, Pusan National University, Yangsan, Korea

BACKGROUND: Implants are widely used as a treatment option for restoring partially or fully missed dentition. However, peri-implantitis can occur due to various causes such as poor oral hygiene, history of periodontitis, and smoking. Planning prosthodontic restoration for patients with a minority of remaining implants because of peri-implantitis is highly challenging process for dentists. The following cases illustrate the process of restoration using milled-bar and zirconia prostheses, utilizing a few remaining implants after implant removal.

CASE 1 : A 63-year-old male patient visited Pusan National University Dental Hospital (PNUDH) with a maxillary complete denture and mandibular implant-fixed prostheses along with temporary partial dentures. Four implants remained in the anterior and left posterior regions of the mandible due to peri-implantitis. An additional implant was placed in the right posterior region of mandible to achieve balance and ensure adequate A-P spread. The milled-bar and zirconia definitive prostheses were fabricated. The patient exhibited satisfaction with the aesthetic and functional outcomes during follow-up evaluations.

CASE 2 : A 72-year-old female patient with implant-fixed prostheses on both maxilla and mandible visited PNUDH in a condition requiring the removal of implants due to peri-implantitis. The implants with poor prognosis were removed, and a milled-bar was fabricated utilizing the remaining six implants. The patient wanted to clean the prostheses regularly, thus the ADD-TOC locator was utilized as a retention mechanism on the milled-bar for zirconia prostheses. The patient satisfied functionally and aesthetically during the regular check-up examination.Both patients were initially restored with implant-fixed prostheses but experienced implant removal due to peri-implantitis. Because of wide gap between the remaining implants, it was challenging to restore them with fixed prostheses. Therefore, splinting the remaining implants into a single unit using a milled-bar allowed for enhanced stability, while zirconia prostheses provided satisfactory functional and aesthetic outcomes. both functionally and aesthetically clinical outcome.

KEYWORDS: Peri-implantitis, milled-bar, zirconia.

OP-08

LAMINATE VENEERS: SMILE DESIGN AND MATERIAL SELECTION FOR ESTHETIC TREATMENT

Ediz ÜNAL, Murat ŞENOL, Hakan TERZİOĞLU, Ayhan GÜRBÜZ
Department of Prosthodontics, Ankara University, Ankara, Turkey

BACKGROUND: Smile is an essential part of an individual personality. The ideal harmony of teeth and gingiva provides an aesthetically pleasing smile. The patient smile should be examined comprehensively, taking into consideration natural proportions, ideal contours, patient concerns and expectations. Digital smile design has been rapidly adopted in dentistry practices in recent years. Thanks to these software programs, patients facial shapes and requirements are taken into consideration and the design shapes are blueprint as natural and beautiful as possible. For a successful result, the design should be done either by a clinician or through guiding the technician.

CASE: In order to achieve predictable clinical results, a comprehensive knowledge of basic aesthetic and restorative principles is required. The most common design-based fabrication techniques include CAD/CAM milling and heat-pressed ceramic. In this case series, we firstly present the aspects to be considered in digital smile design and compare both CAD/CAM milling and heat-pressed ceramic methods in terms of marginal fit, chair time and aesthetics.

CONCLUSION: Digital smile design can improve the efficiency of dental treatment by enabling clinical risk assessment and patient interaction. This allows the creation of prosthetic restorations that are both aesthetically and functionally reliable. In our presented cases, laminate veneers produced by heat-pressed ceramic were found to have more acceptable aesthetics, while porcelain laminate veneers fabricated by CAD/CAM milling were found to be better in terms of time efficiency. Acceptable restorations were obtained in both fabrication techniques in terms of marginal fit.

KEYWORDS: Digital smile design, mock-up, laminate veneer, CAD/CAM, dental esthetic.

OP-09

IMMEDIATE IMPLANT LOADING SIMULTANEOUSLY 3D BONE AUGMENTATION. A CASE REPORT

Hakan OCAK
Drhakanocak Clinic, Oral and Maxillofacial Surgery, Kayseri, Turkey

CASE: The 29 year old patient was treated with long term orthodontic treatment has missing tooth number 23 referred to clinic.In oral and radiographic examination of the bone defect at region 23 in the esthetic zone.The bone defect side was treated with implant placement.

The patient was treated with bone ring technique simultaneously implant placement and xenografts covered with collagene membrane and immediate temporary prosthetic loading.The implant was loaded permanently with monolithic zirconia crown. 3D bone augmentation amount, bone density hue value and crestal bone level was measured at postoperatively, 6 months and 1 year.

RESULT: The bone ring technique is an effective augmentation technique in severely defects with 3d bone augmentation. At the same time the bone ring technique was provide immediate implant and temporary prosthetic placement with the primary stability especially in the esthetic zone.In the patient 6,7-6.5-6.5 mm bone achieved at the vertical dimension, 9.3-9.3-9.3 mm at the mesiodistal and 9.2-8.7-8.5 mm at the buccolingual dimension in 0 - 3 and 12 month after operation.The bone hue value was 720,1745 and 1895 after 0 – 3 and 12 months. After 3 months the implant was loaded with temporary crown.

KEYWORDS: Bonering, immediate loading, implant.

OP-10

DO SUGARY DRINKS COLOR COMPOSITES MORE?

Nilay BAYRAKTAR, Yeliz Yazıcıoğlu PİRPİR, Osman Tolga HARORLI
Department of Restorative Dentistry, Faculty of Dentistry, Akdeniz University, Antalya, Turkey

AIM: This study assessed the in vitro color stability of the bulk-fill resin composite (Filtek One Bulk Fill) by immersing it in five different solutions.

METHODS: Fifty disc-shaped composite samples were prepared and randomly divided into five groups (n=10). All samples were hydrated in distilled water at 37°C for 24 hours. Initial color measurements were taken after 24 hours. After 14 days of immersion in control (distilled water), tea (T), coffee (C), coffee with added sugar (CS), and tea with added sugar (TS) solutions, color measurements were repeated, and color differences (ΔE using CIEDE2000) were calculated. Data were analyzed using Shapiro-Wilk and One-Way ANOVA with Tukey Post-Hoc Tests.

RESULTS: All groups exhibited more coloration than the control group. The TS group showed the highest color change, with a statistically significant difference compared to other groups ($p<0.05$). The C and CS groups displayed similar levels of discoloration, while the T group showed a higher increase than the C group.

CONCLUSION: This study investigated the impact of added sugar on color change. Adding sugar to tea resulted in a statistically significant increase in discoloration, while adding it to coffee caused a slight, non-significant increase.

KEYWORDS: Bulk-fill composite resin, color stability, CIEDE2000.

OP-11

ASSESSING LAMINATE VENEER IMPACT ON ORAL HEALTH-RELATED QUALITY: CASE SERIES

Hilal ASUTAY
Uzman DentaClinic, Bursa, Turkey

AIM: Laminate veneer restorations display enhanced ability to reproduce the natural teeth regarding esthetic and biomechanics. The aim of this study was to determine the impact of laminate veneers on oral health-related quality of life (OHQoL).

METHODS: In this case series study, the impact of treatment on OHQol was measured using the standard questionnaire OHIP-14. This tool was applied to 12 patients who visited the private office of the restorative and cosmetic specialist before and six months after treatment.

RESULTS: The maximum score recorded by Oral Health Impact Profile-14 was 33 before treatment, with 29 after treatment. The average score decreased from 14.2 ± 8.24 (before treatment) to 11 ± 9.6 (after treatment). Comparison of the frequencies of patient's responses to OHQoL suggested that changes in OHQoL for question number 4 (uncomfortable to eat food) and question number 9 (difficult to relax) were significant, respectively (P = 0.03, P = 0.02) and for question number 10 (feeling embarrassed) were nearly significant (P = 0.07). All subjects in this study exhibited improvement in OHQoL.

CONCLUSION: Esthetic dental treatment using laminate veneers would significantly affect OHQoL enhancement in some aspects.

KEYWORDS: Porcelain laminate veneer, quality, smile.

OP-12

COLOR STABILITY OF CONTEMPORARY RESINS FABRICATED BY THREE DIFFERENT TECHNIQUES

Bora CAN[1], Demet Çağıl AYVALIOĞLU ŞAMİLOĞLU[1], Ayse ATAY[1], Aslihan USUMEZ[2]
[1]Altınbas University, Faculty of Dentistry, Department of Prosthodontics
[2]Dentalplus Oral and Dental Health Polyclinic, Istanbul, Türkiye

AIM: The aim of our study is to evaluate effect of different types of beverages on the color stability of resins produced with conventional, computer-aided additive and subtractive techniques.

METHODS: A total of 120 specimens were prepared, with 40 specimens for each of 3 different resin materials (Gradia Direct Posterior (GC Corporation, Tokyo, Japan), Grandio Blocs (VOCO GmbH, Germany) and Saremco Crowntec (Saremco, Dental AG, Switzerland)) produced with conventional, computer-aided additive and subtractive techniques. The surfaces of specimens were polished with aluminum oxide discs, and the color, weight, and surface roughness of each specimen were calculated at the beginning of the study. After baseline measurements, 40 discs from each composite group were randomly divided into 4 subgroups of 10 specimens each. All samples were immersed in different beverages, namely cola, green tea, coffee and distilled water (control), in an incubator at 37°C for 12 days, equivalent to 1 year in vivo, and color measurements were taken at intervals of the 3rd, 6th and 12th days. Color measurements were performed with a spectrophotometer (VITA Easyshade Advance, Vident, Brea, CA) according to the CIE L*a*b* system. ΔE values were calculated using the CIEDE2000 color difference formula. Data are analyzed, based on Kolmogorov-Smirnov and Shapiro-Wilk normality tests, using repeated measures one-way ANOVA followed by Tukey's multiple pairwise comparison test. P-value <0,05 was considered as significant.

RESULTS: The highest ΔE value in samples was found in coffee ($p<0.05$),($p=0.01$). Although there was an increase in ΔE values in samples over time, the highest ΔE values were found in resin samples produced with conventional techniques ($p<0.05$), ($p=0.35$).

CONCLUSION: It was found that resins obtained with computer-aided subtractive and additive manufacturing techniques had clinically acceptable color stability against beverages over time, however resins produced with conventional techniques could not maintain their color stability.

KEYWORDS: CAD/CAM, color stability, resin.

OP-13

FABRICATION OF FULL-ARCH PROSTHESIS USING ONE-STEP JAW RELATION TAKING METHOD

Min Jung KANG, Jung Bo HUH, So Hyun LEE
Department of Prosthodontics, Pusan National University Dental Hospital, South Korea

BACKGROUND: In complete-edentulous patients, bite taking is essential for the fabrication of dentures or implant prosthesis, as there is no natural reference for vertical dimension. Therefore, subsequent visits for bite registration are necessary after impression taking. Traditional methods using occlusal rims for bite registration require time for fabrication and intraoral adjustments, leading to patient discomfort with multiple visits. Recently, methods have been developed to alleviate such patient discomfort by obtaining both impression and jaw relation simultaneously.Among these methods, the JB fork developed by the Department of Prosthodontics at Pusan National University Dental Hospital is a digital applicable one-step jaw relation record system. It allows for simultaneous impression taking, verification of anterior tooth arrangement, and recording of vertical and horizontal jaw relations, facilitating the transfer of occlusal plane. In this case report, we introduce two cases of full-arch prosthetic restorations using the JB fork in completely-edentulous patients.

CASE 1: A 73-year-old male patient visited Pusan National University Dental Hospital (PNUDH) with a fractured denture. Intraoral scanning, bite taking using a JB fork and facial scanning was taken at the patient's first visit. 3D-printed temporary complete denture was fabricated After data superimposition. After undergoing an adaptation with temporary denture, the temporary denture was duplicated for final impression and bite registration,leading to the fabrication of the final denture.

CASE 2: A 53 -year-old female patient visited Pusan National University Dental Hospital (PNUDH) with a broken tooth who was using partial dentures. The remaining fractured teeth in the maxilla were extracted, 5 maxillary and 4 mandibular implants were placed, followed by attachment of a milled bar and temporary prostheses. After checking of occlusal relationship, jaw relations, and oral hygiene, zirconia final prostheses were fabricated with the ADD-TOC locator as a retentive attachment. The patient satisfied functionally and aesthetically during the regular check-up examination.

KEYWORDS: Full-arch prosthesis, jaw relation, digital

OP-14

EVALUATION OF COLOR STABILITY OF DIFFERENT CAD/CAM FULL CERAMIC BLOCKS

Ceren KARAAHMETOĞLU[1], Nazire Esra ÖZER[1], Ahmet KARAKOYUN[2], Ece Irem OĞUZ[2]
[1]Department of Prosthodontics, Lokman Hekim University, Ankara, Turkey
[2]Department of Prosthodontics, Ankara University, Ankara, Turkey

AIM: CAD/CAM technology outperformed traditional prosthetic fabrication procedures as a result of advances in digital workflow. Due to the variety of materials used in CAD/CAM method, it is very important to determine the behaviour of these materials in the mouth. Colour stability, is affected by the composition of the restorative material, different types of colouring beverages and the duration of exposure to these materials. The aim of this in vitro study was to evaluate the effect of colour stability of lithium disilicate and feldspathic glass ceramics CAD/CAM blocks exposed to colouring beverages. The null hypothesis of the study is that the colour change of CAD/CAM blocks with different chemical structures will not exceed the acceptability threshold after exposure to the colouring solution.

METHODS: A total of 28 specimens were prepared using two different types of CAD/CAM all-ceramic blocks (GroupCER-B:Cerec Block, GroupUP-CAD:UP-CERA) (n=7). After the initial colour measurements with a spectrophotometer, all specimens were incubated in artificial saliva and tea for 7 days in an incubator, refreshing the solutions every 24 hours. Colour measurements were then repeated and ΔE values were calculated according to the CIE L*a*b system. Data was statistically analyzed by two-way ANOVA and t-test were used for multiple comparisons (α=0,05).

RESULTS: The highest ΔE values were observed in CER-B tea group (16,56±7,29) and the lowest in UP-CAD artificial saliva group (2,91±3,13). In CER-B group, ΔE values of the tea group were significantly higher ($p<0.05$). In UP-CAD group, no difference was observed between tea and artificial saliva groups ($p>0.05$). In artificial saliva, there was no significant difference between CER-B and UP-CAD groups in terms of ΔE values ($p>0.05$), whereas in tea, CER-B group was significantly higher than UP-CAD group ($p<0.05$).

CONCLUSION: Lithium disilicate based CAD/CAM blocks are more resistant to discolouration and may be preferred for clinical use.

KEYWORDS: CAD/CAM, lithium disilicate glass ceramic, feldspathic glass ceramic, colour stability.

OP-15

OPTIMUM SHEAR BOND STRENGTH BETWEEN POLYETHERETHERKETONE AND COMPOSITE RESIN

Başak TOPDAĞI
sultan 2. abdulhamit han eğitim ve araştırma hastanesi, istanbul Turkey

AIM: To investigate the effect of various surface treatments and different application times on shear bond strength between polyetheretherketone and composite resin. And examine the effect of mechanical and chemical surface roughness treatments applied at different times on the PEEK-composite resin bonding.

METHODS: A total of 120 disc-shaped polyetheretherketone specimens were randomly divided into 9 groups and 4 different surface treatments (control, sandblasting, tribochemical silica coating, sulfuric acid) were applied. The sandblasting, tribochemical silica coating, and sulfuric acid processes were performed 3 different times (15s, 30s, 60s). Then, the composite resins were applied to the treated surfaces of the polyetheretherketone specimens. The shear bond strength test and scanning electron microscopy analysis were performed. The data were statistically analyzed using analysis of variance and Tukey's honest significant difference test.

RESULTS: The ANOVA detected significant differences among the surface treatments of the PEEK specimens ($p < 0.001$). One-way analysis of variance revealed differences in shear bond strength among the groups ($P < .001$). While the control group showed the lowest bond strength values (4.31 ±1.49 MPa), 60 s of sulfuric acid process showed the highest bond strength values (25.72 ±4.35 MPa).Duncan's multiple comparison test found that there was no difference ($p > 0.05$) between the C and SB15 groups.

CONCLUSION: Depending on the application time to the material, additional surface treatments increase the polyetheretherketone composite bonding. Surface treatments with sulfuric acid applications provide higher surface bonding values than other treatments for every apllication times. There was no difference in terms of bonding values between different application times of sandblasting and tribochemical silica coating applications, except for the 15 s sandblasting treatment.

KEYWORDS: peek, shear bond strength, application time.

OP-16

AN EVALUATION OF THE SHEAR BOND STRENGTH OF FLOWABLE COMPOSITES WITH A HIGH FILLER RATIO COMPARED TO PACKABLE COMPOSITES AND TRADITIONAL FLOWABLE COMPOSITE RESINS

Rahime Zeynep ERDEM[1], Kevser KARAKAYA[2]
[1]Department of Restorative Dentistry, Afyonkarahisar Health Scıences Unıversty Faculty of Dentistry, Afyonkarahisar,Türkiye
[2]Department of Prosthodontics,Afyonkarahisar Health Scıences Unıversty Faculty of Dentistry, Afyonkarahisar,Türkiye

AIM: The aim of this study was to compare the shear bond strength of high filler content flowable composite resins with each other. Comparisons were also made with traditional flowable composite and packable composite resin used together with a universal adhesive applied in the form of “etch and rinse” and “self-etch”.

METHODS: A total of 48 samples prepared on third molar teeth with no decay were randomly separated into 4 main groups, and then into paired subgroups of 12 samples in each. The 4 main groups were 1) Group G-aenial Posterior where posterior composite was used, 2) Group G-aenial Universal Flo where high filler flowable compositie was used, 3) Group Majesty Es Flow where high filler flowable composite was used, and 4) Group RUBY Flow (RF) where flowable composite was used. Scotchbond Universal Plus was applied as the adhesive system with the two different methods of Self-Etch (SE) and Etch and Rinse (ER) to each of the paired subgroups.. The micro shear bond strength of the samples was determined using a universal test device. Data were analyzed using Two-Way Analysis of Variance and the Tukey HD test (α= 0.05).

RESULTS: The micro shear bond strength of the G-aenial Universal Flo group samples was determined to be significantly different from that of the other three groups ($p<0.001$). When the results of the subgroups were examined, the shear bond strength of the composite blocks where the ER method was used in the adhesive system was found to be statistically significantly greater than that of the SE method blocks ($p<0.05$).

CONCLUSION: Of the 4 composite materials tested, the shear bond strength values were seen to be highest in the G-aenial Unversal Flo dentin. Etching with acid was found to increase the bond strength values of the materials.

KEYWORDS: High filler flowable composite, adhesives, acid etching, micro-shear bond strength.

This study was supported by "Afyonkarahisar Health Science University" within the scope of the project numbered "23.KARIYER 009

OP-17

EVALUATION OF DENTAL PHOTO-POLYMERIZATION UNITS: A QUANTITATIVE COMPARISON

Ezgi TÜTER BAYRAKTAR, Bora KORKUT
Marmara University Faculty of Dentistry, Department of Restorative Dentistry

AIM: To assess the irradiance (IR) of different led curing units and the correlation of parameters such as main penetration depth (MPD), total penetration depth (TPD), diameter, and scattering.

METHODS: Twenty-two curing units/modes were investigated and divided into 3 groups as per irradiances: Group 1, (IR <1000mw/cm2 / n=7), Group 2 (IR 1000-1500mw/cm2 / n=8), Group 3 (IR >1500mw/cm2 / n=7). IR values were assessed by a clinical radiometer (Ivoclar Vivadent). MPD, TPD, tip diameter, and scattering angle values were measured by a novel methodology through specific photographs of visible blue-light with standardized shooting parameters and then quantitatively evaluated in the Photoshop CC software (Adobe). The deemed significance was set at <.050.

RESULTS: There are significant differences for IR (p<0,001), MPD (p<0.001), and TPD (p<0.001) values among the 3 groups. The highest IR was found for Group 3 (2180.95±434.68b) and no significant difference was observed between Group 1 (1128.57±299.24a) and Group 2 (1445.83±219.94a). The highest MPD was determined for Group 3 (2.64±0.41a) and followed by Group 2 (2.11±0.26b) and Group 1 (1.72±0.27c), respectively. There is no significant difference for TPD among Group 1 (4.29±0.83a) and Group 2 (5.09±0.5a), whereas the highest value was detected for Group 3 (5.7±1.13b). There were no significant differences for diameter (p=0.198) and scattering (p=0.735) parameters among all the groups.

CONCLUSION: Due to the collected higher total and main penetration depths, it might be considered that, the curing units with higher irradiances (>1500mw/cm2) might have positively affect the clinical success by providing a more effective photo-polymerization, especially for the deep cavities. Tip diameter and scattering angle were not considered effective factors for the clinical success under the limitations of this study.

KEYWORDS: Curing unit, irradiance, penetration depth, polymerization, scattering.

OP-18

INDIRECT TRANSFER OF THE EMERGENCE PROFILE TO THE IMPRESSION POST

Ilkay GÜL
Dental estetik center

BACKGROUND: Properly designing the emergency profile of implant-supported prostheses ensures that the implants and prostheses are compatible with other teeth, that the prostheses perform their chewing function properly, and that the gums are healthy and in harmony with the surrounding implants.

CASE REPORT: A temporary crown was created on the appropriate abutment to support the gingiva. Sufficient distance was opened for papillae to form in the interproximal area. Since non-functional loading was planned, all contact points of the temporary crown were completely cut off. In the control session, the patient's stitches were removed and the effect of the temporary crown on the gums was evaluated. The patient was called for a check-up and oral hygiene, mobility, occlusion and the direction of gingival healing. When deemed necessary, acrylic resin was added to the temporary crown and abraded. Before preparing the permanent dentures, the impression post was specially shaped.

The temporary prosthesis used in the mouth to shape the impression piece was removed from the mouth, placed on a plaster analogue, and fixed with finger force. The temporary crown attached to the analogue was immersed in c-type silicone and the measurement of the gingival formation created in the temporary crown was taken. Then, the temporary restoration was removed and an impression post was placed inside the silicone impression. By applying fluid composite around the impression post, the exit profile was copied around the impression post.

CONCLUSION: Designing and applying the correct exit profile of implant-supported dentures affects important factors such as aesthetics, function, tissue health, comfort and long-term durability. This technique can be easily applied with the help of materials routinely used in clinics.

KEYWORDS: Emergence profile, immediate loading, implant impression.

POSTER PRESENTATIONS

EP-01

COMPARATIVE STUDY OF SOME MODALITIES FOR RECOVERING PALATAL DONOR SITES

Dong-Woon LEE
[1]Department of Periodontology, Wonkwang University College of Dentistry, Iksan, Republic of Korea
[2]Wonkwang Dental Research Institute, Iksan, Republic of Korea

BACKGROUND: Autogenous soft tissue grafting is considered to be a highly predictive procedure. However, it causes discomfort to the patient because of the palatal donor site. Some studies have used soft tissue substitutes rather than autologous tissue harvesting. However, long-term stability has not yet been guaranteed.

METHODS: After harvesting of soft tissue, some modalities (Surgical stents with Omi-vacuum form, periodontal dressing using Coe-Pak, and newly 3D printing surgical stents) can be used to recover the palatal area. They contribute to reducing pain or bleeding control. However, each method has its advantages and disadvantages.

Therefore, we conducted a comparative study with harvesting free-gingiva with epithelium or de-epithelized connective tissue.

RESULTS: Nine patients had received connective tissue grafts. We measured Patient Reported Outcome Measures (PROMs) using the numerical rating scale during four follow-up visits; Day 0(day of surgery), Day 1(next day), Day 2(2 weeks later, stitch out). Both of the two stent groups reported minimal discomfort (< 3). However, the periodontal dressing group showed relatively greater discomfort (> 5).

CONCLUSION: The patient's pronunciation and swallowing of the customized group without occlusal surfaces showed a significantly good response. There will be a need to increase the sample size and support these results through more controlled studies.

KEYWORDS: 3D Printing, stents, connective tissue.

EP-02

EFFECT OF ELECTRONIC-CIGARETTE ON COLOR STABILITY OF ARTIFICAL TEETH

Yeon Hee PARK, Jae Min SEO, Ju Mi PARK, Seung Keun AHN, Jung Jin LEE
Department of Prosthodontics, Institute of Oral Bio-Science, School of Dentistry, Jeonbuk National University and Research Institute of Clinical Medicine of Jeonbuk National University, Jeonju, Korea.

AIM: The purpose of this study was to compare the effect of traditional cigarettes and electronic cigarettes(ECs) on the color stability of artificial denture teeth.

METHODS: Ninety upper central incisors artificial denture teeth (Endura HC5; Shofu) were divided into 3 groups. Group C, kept in fresh air and considered the control; CG, exposed to conventional cigarettes (Marlboro Medium, Philip Morris); EG, exposed to electronic cigarettes (IQOS Holder, IQOS Pocket Charger, Marlboro Heets, Philip Morris). The shade of artificial denture teeth was evaluated before smoke exposure using a spectrometer (Shadepilot, DeguDent), according to the CIE L*a*b*. Specimens of groups CG and EG were exposed to 15 cigarettes daily for 7 days. According to Coresta Recommended Method N° 22, the standard conditions used were as follows: puff duration 2.0 seconds with a standard deviation of ≤0.05 seconds for individual puffs, puff frequency - 1 puff every 60 seconds. For each cigarette, 6 puffs were carried out for 312 seconds. After the experiment, the values of CIE L*a*b* were measured. ΔE was calculated to evaluate the color change. Statistical analyses were performed with statistical software (SPSS 22; IBM). The data were analyzed with a paired T-test for discoloration before and after exposure to smoke. One-way ANOVA and Tukey's test were used to evaluate the significant difference between groups (P<.05).

RESULTS: A higher color change was observed on exposure to conventional cigarettes (ΔE=6.93), which was statistically highly significant and clinically unacceptable. In the electronic cigarettes group (ΔE=0.79), a slight change was observed, which was clinically acceptable. Similarly, the color of the control group (ΔE=0.34) also slightly changed, and it was clinically acceptable.

CONCLUSION: Within the limitations of this in vitro investigation, it can be concluded that compared with conventional cigarettes, electronic cigarettes may not significantly affect the discoloration of artificial denture teeth.

KEYWORDS: Color stability, electronic cigarrett, CIELab.

EP-03

EFFECT OF ELECTRONIC-CIGARETTE ON COLOR STABILITY OF ARTIFICIAL TEETH

Jae Jun RYU[1], Chong Yang Lİ[2], Ji Suk SHİM[3]
[1]Department of Prosthodontics, Korea University Anam Hospital, Seoul 02841, Republic of Korea
[2]Department of Medicine, Korea University Graduate School, Seoul, Republic of Korea
[3]Department of Prosthodontics, Korea University Guro Hospital, Seoul, Republic of Korea

AIM: Lithium disilicate (LD, Li2Si2O5) glass–ceramic is one of the most popular dental restorative materials because of its high mechanical strength and favorable esthetic properties. To manufacture dental restorations composed of lithium disilicate (LD) through the computer-aided design and manufacturing (CAD/CAM) process, thermal refinement is an essential process that can affect the optical and mechanical properties of ceramics.

METHODS: In this study, we aimed to evaluate the translucency and flexural strength of lithium disilicate glass–ceramic for CAD/CAM using different thermal refinement schedules and thicknesses by measuring the total transmission of light through the specimen and calculating the peak load of the specimen until fracture in a piston-on-three-ball test, respectively.

RESULTS: The results of this study indicate that as the thickness of lithium disilicate for CAD/CAM and the temperature of thermal refinement decrease, a higher transparency is observed. On the other hand, among thicknesses of 0.5, 1.0, and 2.0 mm, the 1.0 mm-thick samples exhibited the strongest strength, and with 820°C leading to the highest strength among temperatures of 780, 800, 820, 840, and 860°C

CONCLUSION: These findings suggest that it is possible to adjust transparency and strength according to the clinical situation by choosing an appropriate thickness and thermal refinement process.

KEYWORDS: Lithium disilicate glass–ceramic, translucency, flexural strength, firing temperature, thickness.

EP-04

ESTHETIC RESTORATION APPLICATIONS USING DIFFERENT MATERIALS AND TECHNIQUES

Bige KOÇ[1], Deniz ŞEN[2]
[1]Istanbul University, Institute of Graduate Studies in Health Sciences, Department of Prosthodontics, Istanbul, Turkey
[2]Department of Prosthodontics, Istanbul University Faculty of Dentistry, Istanbul, Turkey

AIM: Patients who have metal ceramic fixed partial dentures with impaired marginal adaptation in the anterior region and root canal treated molar tooth with excessive material loss in the posterior region can be rehabilitated by using esthetic materials and minimally invasive techniques together in order to improve smile design and function.

CASE: A 39-year-old female patient with metal ceramic fixed partial dentures in the anterior region and excessive material loss in the posterior region was determined to be rehabilitated with esthetic materials and minimally invasive techniques together in order to improve smile design and function. The anterior region was restored with laminate veneers and glass ceramic fixed partial dentures following home bleaching application. In order to be used as a guide in laminate veneer preparation and to apply an esthetic temporary fixed partial denture to the patient, the design of the planned restorations were made digitally and applied to the patient with the help of mock up. In the posterior region, esthetic and functional rehabilitation of the root canal treated molar tooth with excessive material loss was restored with a hybrid ceramic overlay. The restorations were cemented with adhesive resin cement under rubber dam isolation. After 1 year of follow-up, no complications were observed.

CONCLUSION: It has been observed that successful clinical results can be obtained in case follow-ups where patients' smile designs and loss of function in the posterior region are rehabilitated by using esthetic materials with minimally invasive techniques.

KEYWORDS: Esthetic material, laminate veneer, hybrid ceramic.

EP-05

PROSTHETIC REHABILIATION OF PATIENTS WITH POST-TRAUMATIC DECIDUOUS TEETH RETENTION

Bige KOÇ[1], Deniz ŞEN[2]
[1]Istanbul University, Institute of Graduate Studies in Health Sciences, Department of Prosthodontics, Istanbul, Turkey
[2]Department of Prosthodontics, Istanbul University Faculty of Dentistry, Istanbul, Turkey

AIM: Zirconia fixed partial dentures are preferable treatment options in the esthetic and functional rehabilitation of patients with retained deciduous teeth and tooth deficiencies in the anterior region due to trauma.

CASE: A 26-year-old male patient with retained deciduous teeth and tooth deficiencies in maxillary anterior region due to trauma was determined to be rehabilitated with a zirconia fixed partial denture to restore smile esthetics and functional occlusion. A mock up was applied to be used as a temporary fixed partial denture until the definitive prosthetic treatment was delivered. Gingivectomy was performed for crown lengthening on the abutment teeth of the patient with a low smile line. No complications were observed after 1-year follow-up of the case.

CONCLUSION: It has been observed that successful clinical results can be obtained in case follow-ups where patients with retained deciduous teeth and tooth deficiencies in the anterior region due to trauma are rehabilitated with zirconia fixed partial dentures in esthetics and function.

KEYWORDS: Trauma, zirconia fixed partial denture, deciduous teeth.

EP-06

PRECISION DENTISTRY: NOVEL DIGITAL APPROACH IN AMELOGENESIS IMPERFECTA REHABILITATION

Vania OLCAY, Marie Therese TEEHANKEE, Camila S. SAMPAİO
Department of Esthetics, New York University, New York, United States of America

AIM: This case reports a comprehensive rehabilitation of a 29-years-old patient with amelogenesis imperfecta and a congenitally missing canine, emphasizing a fully digital approach, including the specialties of periodontics, implants, and esthetics. This meticulous approach aims at achieving precise and esthetically pleasing outcomes.

CASE: A complete esthetic evaluation was conducted on a patient with amelogenesis imperfecta, revealing typical enamel abnormalities and a mobile primary upper canine without a succeeding tooth. Extraoral and intraoral photos, including intraoral scans (Planmeca) were obtained. A digital wax-up (Autocad,Meshmixer) was fabricated and tried as a mock-up. A comprehensive treatment plan was discussed with the patient—this involved gingivectomy and crown lengthening procedures to be guided by 3D-printed guides, implant placement guided with a 3D-printed index, and restorations with lithium-disilicate veneers and an implant crown. 3D-printed reduction guides were used during tooth preparation to preserve natural aesthetics. The final ceramic restorations were fabricated in Exocad and milled using Ceramill

This case introduced a novel, fully digital step-by-step plan, showcasing efficient visualization tools for both the dentist and the patient. The approach proved to be predictable and minimally invasive in addressing the patient's esthetic concerns. The integration of digital tools streamlined the treatment workflow, minimizing chair time, and optimizing overall treatment outcomes.

CONCLUSION: In conclusion, this case demonstrates effective management through integrated implant placement, crown lengthening, and veneer restorations, employing innovative digital tools for predictability in amelogenesis imperfecta cases. The patient's journey to a confident, functional smile exemplifies positive outcomes from a thoughtful and collaborative dental approach.

KEYWORDS: Digital workflow, interdisciplinary dentistry, minimally invasive, digital planning, wax-up, esthetics rehabilitation.

EP-07

DIGITAL WAX-UP: A NOVEL APPROACH TO MULTIDISCIPLINARY TREATMENT PLANNING

Marie Therese TEEHANKEE, Vania OLCAY, Camila S. SAMPAİO
Department of Esthetics, New York University, New York, United States of America

AIM: This case reports a comprehensive rehabilitation of a 29-year-old patient with microdontia and several diastemas on her upper dentition and a congenitally missing upper canine, with gingival overgrowth on both arches. It explains the significance of a digital wax-up to deliver a comprehensive treatment plan. These include an intraoral mock-up, fabrication of a crown lengthening guide, and an implant surgical guide.

CASE: A complete comprehensive evaluation was performed, and intraoral scans (Planmeca) were obtained. The files were imported into Exocad, where a digital wax-up was created and printed. A putty guide was created from the 3D printed model and tried in on the patient. Once the patient approved the treatment, a cone-beam CT scan (CBCT) was taken to determine the bone level and density. The digital wax-up was superimposed on the CBCT to guide the fabrication of the crown lengthening and implant surgical guide on Exoplan. The final lithium disilicate restorations were fabricated according to the provisional restorations made from the digital wax-up.

The fabrication of a digital wax-up served as a reference to the esthetic treatment plan of the patient, including a surgical guide for crown lengthening and implant placement. This ensured a harmonious workflow and consistency between the procedures, also improving communication between the specialists. Using these types of tools secure a correct communication with the different specialists and a minimally invasive treatment.

CONCLUSION: This case report aims to demonstrate that the use of a digital wax-up, can guide the treatment for crown lengthening and implant placement, and serve as a blueprint for the final restorations. This increases the predictability of an interdisciplinary treatment plan.

KEYWORDS: Digital dentistry, digital planning, digital workflow, interdisciplinary dentistry, wax-up.

EP-08

COMPARISON OF DIFFERENT MATERIALS IN ENDOCROWN RESTORATIONS: CASE SERIES

Aybüke Verda YILDIRIM, Ediz ÜNAL, Sema MURAT
Department of Prosthodontics, Ankara University, Ankara, Turkey

METHODS: With the widespread use of the adhesive system in dentistry and developments in the digital field, endocrown application has recently become a preferred application in endodontically treated teeth with excessive material loss due to the principle of minimally invasive preparation, preservation of the remaining tooth structure, meeting aesthetic expectations and shortening clinical time.

RESULTS: Endocrowns can be fabricated from a variety of materials, including lithium disilicate glass-ceramic, zirconia-reinforced lithium silicate glass-ceramic, polymer-added hybrid ceramic, resin matrix ceramic and polyether ether ketone (PEEK), according to the literature, glass ceramics reinforced with leucite or lithium disilicate have been the best choice for the fabrication of endocrowns because they exhibit higher flexural strength than feldspathic glass ceramics and composite resin and can withstand occlusal forces during mastication. However, the advantages of composites are that they are more flexible than ceramics, which has a positive effect on the stresses transferred to the cavity walls, and they do not have an abrasive effect on the opposing teeth. The aim of this case series is to compare lithium disilicate-reinforced glass-ceramic and hybrid ceramics in terms of marginal adaptation and esthetics.

CONCLUSION: Material selection is one of the most important stages in the clinical success of endocrown restorations. Aesthetic expectations, marginal adaptation, fracture strenght, mechanical performance, and long-term durability should be considered. The results of this case study indicate that both materials used were acceptable in terms of esthetics, marginal adaptation, and patient comfort.

KEYWORDS: Endocrown, CAD CAM, adhesive restoration, esthetics, marginal adaptation.

EP-09

CLOSURE OF MIDLINE DIASTEMAS USING COMPOSITE RESINS: ONE-YEAR FOLLOW-UP

Abdurrahman Yalçın* , Semih Şeker**
*Restorative Dentistry, Batman University, Batman, Türkiye
** Dicle university, Diyarbakır, Türkiye

AIM: To provide oral rehabilitation with a minimally invasive, practical and low-cost treatment option in order to eliminate the aesthetic, functional and psychological problems caused by anterior diestema in patients.

METHODS: In the intraoral examination of the patients who applied to the clinic with the complaint of maxillary midline diastema, it was seen that the diastema was caused by frenectomy, and frenectomy was performed in the periodontology department. Following the healing of the soft tissues, restorative treatment was started. Isolation was achieved by applying a rubber dam up to the first premolar teeth. While the adjacent central tooth was closed with Teflon tape, the other one was restored. 37% phosphoric acid was applied to the mesial surfaces for 30 seconds. Rinsed with water for 30 seconds and gently air dried. Universal bonding agent was applied. It was polymerized for 10 seconds with an LED light device. Free hand training was performed in both patients. In the first patient, the restoration was made using only polychromatic A1 color G-aenial A'CHORD aesthetic composite. In the second patient, the layering technique was used because the diastema was wider. The palatal wall was created with JE composite using transparent tape. Then, the opacity of the natural tooth was imitated with the AO1 opaque color. Finally, the restoration was completed using polychromatic A1 color. The vestibule surfaces of the restorations were arranged using a red-banded diamond bur. 3M SofLex polishing discs were used for detailed polishing from coarse to fine grains using a low-speed hand tool. It was done using Clearfil Twist Dia for surface polishing. The patients were called for a follow-up visit after 1 year and follow-up photographs were taken.

RESULTS: As a result of the restoration, the aesthetic appearance of the patients was achieved. Although longer-term follow-ups are needed in composite restorations, restoration problems such as marginal leakage, discoloration, and fracture in composite resins usually occur within 6 months after treatment. Even after 1 year, no problems were observed in the restoration.

KEYWORDS: Anterior Aesthetics, Diastema, Simplyshade

EP-10

AESTHETIC REHABILITATION WITH A MULTIDISCIPLINARY TREATMENT APPROACH IN ANTERIOR REGION

Naz TUNÇ[1], Deniz ŞEN[2]
[1]Department of Prosthodontics, Institute of Graduate Studies in Health Sciences, Istanbul University, Istanbul, Turkey
[2]Department of Prosthodontics, Istanbul University, Istanbul, Turkey

AIM: It is possible to rehabilitate patients with high smile line and porcelain fused metal crown restorations in the anterior region with multidisciplinary treatment methods using different aesthetic materials.

CASE: A 36-year-old female patient referred to Istanbul University Prosthodontics clinic to replace the porcelain fused metal bridge restorations in the upper jaw anterior region and to correct the unaesthetic appearance caused by diastema in the lower jaw anterior region. As a result of the clinical examination, it was determined that there was disocclusion in the porcelain fused metal bridge restorations in the posterior regions of the right upper and lower jaw and therefore they were non-functional. Since the patient had a high smile line, as a treatment plan, gingivectomy was performed on the abutment teeth for the crown lengthening. Four glass-ceramic crown restorations were placed in the upper jaw anterior region. Diastemas in the anterior region of the lower jaw were filled by injection molding technique with flowable composite. Porcelain fused metal bridge restorations were replaced to provide canine-protected occlusion in the upper and lower jaw posterior regions, and function was restored.

CONCLUSION: After 6 months of follow-up, no problems were detected with the preferred treatment method. Successful clinical results have been achieved in patients with high smile lines by performing gingivectomy, crown lengthening and rehabilitation with glass-ceramic restorations.

KEYWORDS: Glass-ceramic, high smile line, injection molding.

EP-11

ADHESIVE BRIDGE RESTORATION IN THE ANTERIOR REGION: CASE REPORT

Ahmet Efe TAÇ[1], Deniz ŞEN[2]
[1]Istanbul University Faculty of Dentistry, Institute of Health Sciences, Department of Prosthetic Dentistry
[2]Istanbul University Faculty of Dentistry, Department of Prosthetic Dentistry

BACKGROUND: Adhesive bridge prosthesis are a minimally invasive treatment approach that will not damage the adjacent tooth structure for the rehabilitation of aesthetic, phonation and functional losses in patients with a single missing tooth in the anterior region.

CASE: A 58-year-old male patient refered to Istanbul University Prosthodontics clinic due to missing tooth number 21. Since the mesiodistal width in the missing tooth area was comparatively lager than the mesiodistal width of tooth number 11, composite restoration of tooth number 11 was performed. Then, an adhesive bridge prosthesis was made using zirconia-based ceramics and the aesthetic appearance in the anterior region was achieved.

CONCLUSION: During the 6-month follow-up of the case, no complications were observed in the preferred treatment method. Successful clinical results have been achieved as a result of the rehabilitation of a single missing tooth in the anterior region with zirconia-based adhesive bridge prostheses.

KEYWORDS: Zirconia,adhesive bridge prosthesis,esthetic.

EP-12 (WITHDRAWN)

EP-13

REHABILITATION OF IMMEDIATE IMPLANTATION WITH FULL-DIGITAL WORKFLOW: 2CASEREPORTS

Vedat EFE[1], Dersim GOKCE[2]
[11]Private Clinic, Mardin, TURKİYE
[22]İstanbul Atlas Üniversitesi, İstanbul, TURKİYE

BACKGROUND: In recent years, monolithic zirconia ceramic restorations have been introduced for the use in posterior area, that have excessive chewing forces. Thus, it is aimed to prevent the chipping of the veneering porcelain.

CASE 1: A 37-year-old male patient applied to our clinic with the complaint of advanced mobility in his teeth. The patient, whose all maxillary teeth were extracted, had 6 implants placed in the same session. Multiunit abutments were placed in the appropriate position and digital scan of the patient was made. The next day, the prepared CAD/CAM acrylic (PMMA) temporary teeth were applied to the patient. After osseointegration was completed, the maxilla and mandible were scanned with a pre-preparation scan and then the bite was taken. Then, the temporary prosthesis was removed and tissue scan was taken from the multiunit abutments, then scan bodies were attached and an implant scan was performed. In this case, in which immediate acrylic prosthesis and pre-preparation scanning were combined, FP2 prosthesis was produced from full monolithic zirconia and applied to the patient.

CASE 2: A 42-year-old female patient applied to our-clinic with the complaint of missing teeth. In the tomography of the systemically healthy patient, 6 implants were planned for the maxilla and 4 implants for the mandible. A removable temporary prosthesis was made for the patient and follow-up appointments were made. A scan was taken from the patient, whose gingival emergence profile was prepared, with full digital workflow, and temporary was made from 3D printer. By adjusting the closure and vertical dimension on the temporary prosthesis, full monolithic zirconia FP1 prosthesis was prepared for the patient.

CONCLUSION: The aesthetic and functional expectations of the patients, who had no soft tissue loss due to the temporary restoration and immediate loading, were met.

KEYWORDS: Monolitic Zirconia, implant, esthetic dentistry, immediate loading.

EP-14 (WITHDRAWN)

EP-15

TREATMENT OF LATERAL INCISORS ANOMALIES WITH COMPOSITE RESTORATION: CASE SERIES

Abdurrahman YALÇIN[1], Hande SAR SANCAKLİ[2]
[1]Department of Restorative Dentistry, Batman University, Batman, Turkey
[2]Department of Restorative Dentistry, Istanbul University, Istanbul, Turkey

AIM: Different congenital anomalies in the maxillary lateral teeth cause diastema formation between the central and canine teeth. It was aimed to provide aesthetic rehabilitation by using composite resins in three cases.

METHODS: In the first and second cases, alginate impressions were taken in the first session and a plaster model was obtained. Wax modeling was done on the model. In the second session, tooth color was selected using dental photography in daylight. To evaluate the appearance of the model on the patient's teeth, temporary restoration material was used to restore the teeth. After evaluating the patient's mouth and photographs, the treatment phase began.Teeth were isolated with a rubber dam. There was no abrasion of the surface of the teeth. 37% orthophosphoric acid was applied to the surface of the teeth for 30 seconds. Adhesive agent was applied and polymerized with LED light for 20 seconds. Translucent composite was placed on the created silicone key to create a palatal wall. The dentin layer was created with opaque composite. Finally, the restoration was completed using A1 body composite. The final layer was applied using a sable brush and modeling resin. The same procedures were applied to the lateral teeth and the restoration was completed. In the third case, the restoration was made using the same materials by working hand-free. The primary and secondary morphology of the restoration was created. After the polishing process, the restoration was completed.

RESULTS: Restoration was scored according to modified USPHS criteria at all follow-up periods (1 week, 1 month, and 6 months). According to the scoring, no discoloration, secondary caries, marginal discoloration, surface defects or fractures were observed in the restoration. Direct composite resins can be considered as a minimally invasive treatment option to ensure aesthetics in anomalies seen in lateral teeth.

KEYWORDS: Diastema, congenital anomaly, aesthetic restoration.

EP-16

EFFECT OF HEAD POSITION IN THE SMILE ON ESTHETIC PARAMETERS

Kosuke KASHİWAGİ[1], Yurie SHİNOZAKİ[1], Masaki SATO[1], Katsunori TORİİ[1], Hitoshi MİKİ[2], Junko TANAKA[1]
[1]Department of Fixed Prosthodontics and Occlusion, Osaka Dental University, Osaka, Japan
[2]Habara Dental Clinic, Osaka, Japan

AIM: It has been reported that the shape of the dentition and impression of the maxillary anterior teeth, which are particularly important in esthetic dentistry, differ depending on the observer's viewing direction. The purpose of this study was to determine the effects of different head positions on the exposure of the maxillary anterior teeth and aspect ratio of the maxillary right central incisor during smiling.

METHODS: The subjects were healthy dentulous individuals with natural maxillary anterior teeth and a Class I occlusal relationship. Based on the smile type classification, 18 subjects were selected: nine in the average smile group and nine in the low smile group (LS). The head positions were Camper's plane as the horizontal reference plane (CP), the Frankfort horizontal plane as the horizontal reference plane (FP), and the natural head position (NHP). The 3D virtual patient was mounted in three different head positions on a virtual articulator using CAD software.SCAN (Zirkonzahn) and quantitatively analyzed using Rhino 7 (Robert McNeel & Associates). The degree of exposure of the maxillary anterior teeth was calculated as "exposed crown area of the maxillary anterior teeth/clinical crown area of the six maxillary anterior teeth in the frontal view"(EM) in each head position. The aspect ratio of the maxillary right central incisor was calculated as "crown width diameter/crown long-axis diameter"(AM). Two-way analysis of variance was used to compare the EM in different head positions, and Friedman's test was used to compare the AM in different head positions.

RESULTS: EM was significantly different between CP-FP and CP-NHP in the LS group, with CP having the highest value. For AM, the values were significantly higher for CP than for FP and NHP.

CONCLUSION: The esthetic parameters of the maxillary anterior teeth were found to be influenced by the head position.

KEYWORDS: Natural head position, esthetic analysis, smile design, face scanner.

EP-17

IMPROVEMENT OF AESTHETICS CLASS III MALOCCLUSION TREATMENT WITH ORTHOGNATHIC SURGERY

Belin ALTUNTAŞ, Berfin AKASLAN, Sıla BAŞA
Department of Orthodontics, Okan University, Istanbul, Turkey

BACKGROUND: Skeletal Class III malocclusion results from mandibular prognathism, maxillary growth deficiency or a combination of both. Treatment choices includes orthodontic, orthopedic and surgical procedures. There are also some approaches in surgical procedures, such as mandibular setback or bimaxillary surgery with maxillary first. Bimaxillary orthognathic surgery, adjusting both jaws, is increasingly favored as it reduces the risk of breathing issues such as Sleep Disorder Breathing by minimizing extensive lower jaw movement and improving airway passages.

AIM: The aim of the study is to treat a patient with skeletal Class III malocclusion with orthodontic treatment and orthognathic surgery and improved aesthetically facial appearance and to examine the changes in respiratory function.In this case report presents a 27-year-old female patient with skeletal Class III malocclusion. The primary complaints of the patient; unsatisfactory facial aesthetics, maxillary retrusion, and discomfort in respiratory function. Extraoral examination show patient has facial concavity, minor asymmetry, and slight laterognathia detected. In the cephalometric examination developmental Class III facial profile observed.

RESULTS: The incisor inclinations were decompensated with orthodontic treatment before surgical treatment. The operation is designed with a maxillary first approach, where the initial step involves repositioning the maxilla followed by stabilization and subsequent repositioning of the mandible. Surgical plan includes a 6 mm advancement for the maxilla and an anticipated counterclockwise rotation for the mandible and fixed with rigid fixation.

CONCLUSION: Overall, the combined orthodontic and surgical treatment Class I molar and canine relationship was achieved in occlusion with a straight soft tissue profile, achieve a normal overbite and overjet relationship and resulting in improved facial aesthetics and respiratory function. And the OSA test performed on the patient before and after the surgery, showed that the bimaxillary approach could reduce the risk of Sleep Disordered Breathing.

KEYWORDS: Aesthetics, orthognathic surgery, class III malocclusion, orthodontics.

EP-18 (WITHDRAWN)
EP-19 (WITHDRAWN)
EP-20 (WITHDRAWN)

EP-21

PRESERVATION OF TISSUE MORPHOLOGY THROUGH THE USE OF REPLICATING ROOT-STRUCTURE

Young Jun LİM, Se Hyoun KİM, Ho Beom KWON, Myung Joo KİM
Department of Prosthodontics, School of Dentistry, Seoul National University

METHODS: Improving the aesthetics of the maxillary anterior teeth and providing stable support for the periodontal complex can be achieved through the creation of an appropriate emergence profile. In this case, a digital customized abutment was pre-manufactured by referencing the natural teeth prior to implant surgery, followed by installation of non-functional provisionalization. The final prosthesis was then produced with the aid of double-scanned support information and previously pre-scanned data.

KEYWORDS: tissue morphology, pre-scan data, abutment replicating

edad
TURKISH ACADEMY OF ESTHETIC DENTISTRY

INTERNATIONAL FEDERATION
OF ESTHETIC DENTISTRY



opteamist
key to synergy
turizm & organizasyon