

10TH EDITION OF INTERNATIONAL CONFERENCE ON

DENTISTRY AND ORAL HEALTH



13-15 MARCH, 2025 | ROME, ITALY
HYBRID EVENT

Venue: NH Villa Carpegna, Via Pio IV, 6, 00165 Roma RM, Italy

BOOK OF ABSTRACTS



Index

Welcome Messages	5
About Magnus Group	7
About Dental 2025	8
About CE Accreditation	9
Table of Contents	10
Keynote Presentations	15
Oral Presentations	35
Poster Presentations	85
Workshops	95

4



Dear Attendees, Presenters, Organizing Committee and Distinguished Guests

The invitation to write this welcome message is both an honour and a privilege and as such I am very grateful to the Organizing Committee of Dental 2025. On behalf of the Organizing Committee, I would like to warmly welcome you to the "10th Edition of International Conference on Dentistry and Oral Health" which will be held in the historical city of Rome or alternatively on-line if you are unable to present inperson. The theme of this year's conference "Smile Brighter, Live Better: Exploring Modern Dental Solutions." You will have the opportunity to listen to well-known speakers on a wide range of topics over the course of the conference. There will also be an opportunity for colleagues to present their area of expertise to their colleagues, which in turn will help foster cooperation between colleagues across the research world. I hope that you will not only enjoy the conference but also establish links for future research as well as foster friendships that will endure for years to come.

David Geoffrey Gillam

Queen Mary University of London, United Kingdom



Dear Conference Attendees,

It is an honor and a great pleasure to welcome you to the 10th Edition of International Conference on Dentistry and Oral Health, theme "Smile Brighter, Live Better: Exploring Modern Dental Solutions."

The future of dentistry requires professionals, clinicians, scientists, and researchers to collaborate in developing innovative solutions challenges that drive to the advancements in the field. This conference embraces a multidisciplinary approach, bridging basic science, clinical practice, and public health to address global dental issues. Held in the historic city of Rome, Italy, this edition of the conference presents a unique opportunity to engage, exchange knowledge, and stay updated with the latest developments in dentistry. Over the years, this international gathering has highlighted the importance of continuous progress and innovation, and your participation will contribute to building and strengthening this legacy.

Welcome to Dental 2025—we look forward to your presence, your insights, and, of course, your smile!

Vitoldo Antonio Kozlowski Junior

Ponta Grossa State University, Paraná, Brazil



Magnus Group, a distinguished scientific event organizer, has been at the forefront of fostering knowledge exchange and collaboration since its inception in 2015. With a steadfast commitment to the ethos of Share, receive, grow, Magnus Group has successfully organized over 200 conferences spanning diverse fields, including Healthcare, Medical, Pharmaceutics, Chemistry, Nursing, Agriculture, and Plant Sciences.

The core philosophy of Magnus Group revolves around creating dynamic platforms that facilitate the exchange of cutting-edge research, insights, and innovations within the global scientific community. By bringing together experts, scholars, and professionals from various disciplines, Magnus Group cultivates an environment conducive to intellectual discourse, networking, and interdisciplinary collaboration.

Magnus Group's unwavering dedication to organizing impactful scientific events has positioned it as a key player in the global scientific community. By adhering to the motto of Share, receive, grow, Magnus Group continues to contribute significantly to the advancement of knowledge and the development of innovative solutions in various scientific domains.



Welcome to the 10th Edition of International Conference on Dentistry and Oral Health (DENTAL 2025), scheduled from March 13-15, 2025, in Rome, Italy. This year's theme, "Smile Brighter, Live Better: Exploring Modern Dental Solutions," brings together a global community of dentists, researchers, academicians, and industry leaders to discuss the latest advancements in dentistry and oral healthcare.

Our program features keynote presentations, oral and poster sessions, and interactive workshops, fostering collaboration and knowledge exchange in cutting-edge dental research and technology.

As you explore this Dental 2025, you will discover groundbreaking research and innovations that contribute significantly to the field of dentistry and oral health. Whether attending in-person or virtually, participants will have the opportunity to engage with leading experts and peers, shaping the future of dental care.



The Continuing Education (CE) credits available at DENTAL 2025 hold significant value for participants, recognizing and affirming their dedication to continuous learning and professional growth. Earning CE credits brings numerous advantages, such as advancing one's career, upholding professional credentials, expanding knowledge, and fostering networking opportunities.

By attending DENTAL 2025 and acquiring CE credits, individuals showcase their commitment to ongoing education, elevate their professional standing, and open doors to career progression. Moreover, meeting a minimum CE credit requirement is often obligatory for maintaining certifications or licenses in various fields.

The DENTAL 2025 conference not only offers ample networking opportunities with peers and experts but also facilitates the expansion of professional connections and the cultivation of potential collaborations. Notably, each attendee will receive a total of 28 CE credits at the conference.

Title: Case report: A rare presentation of florid cemento-osseous dysplasia Anya Rani Sharma, Northern Care Alliance & Manchester Foundation Trust, United Kingdom	86
Title: Food for thought Anya Rani Sharma, Northern Care Alliance & Manchester Foundation Trust, United Kingdom	36
Title: Breathing easy: The role of nitrous oxide in stress-free pediatric dentistry Arpita Shah Jhaveri, Goregaon Dental Centre, India	38
Title: The future of dentistry: Artificial intelligence Arshia Rashid Baig, Sharad Pawar Dental College, India	40
Title: Ceramic overlay to restore a heavily compromised tooth: A case report Balkis Khadhraoui, University of Monastir, Tunisia	41
Title: Precision in prevention: The iTOP approach to periodontal health Bennete Fernandes, SEGi University, Malaysia	16
Title: Traumatic lesions of lip and gingiva - Appearance and management Bharat Joshi, MMCDSR Mullana Ambala Haryana, India	42
Title: TOTS, lasers, airway and pediatric dentistry Brynn L Leroux, Associates in Pediatric Dentistry, United States	43
Title: Obstructive sleep apnoea: The general dentist's role in identifying, referring, and supporting patients Christy Chan, King's College Hospital, United Kingdom	44
Title: Advanced aesthetic planning in dental implants Cindy Dodo, Marquette University School of Dentistry, United States	46
Title: Development and implementation of digital technologies for assessing the state of the dental system and assessing its deviations from normal parameters Daniil Kaplan, Russian University of Medicine, Russian Federation	47
Title: Innovation of novel products for the treatment of dentine hypersensitivity: A personal journey	18
David Geoffrey Gillam, Queen Mary University of London, United Kingdom	
Title: Counterclockwise rotation in sleep apnea patients Eduardo Rubio, Universidad Católica Argentina, Argentina	49
Title: Changing trends in endodontic sealers and focus on its cytotoxicity Emmanuel Samson, Government Medical College & Hospital, India	50

Title: Bridging the gap: Enhancing collaboration between dentists and dental therapists/hygienists for optimal patient outcomes Enass Shamsy, University of Lincoln, United Kingdom	51
Title: Comparison of maxillary expansion outcomes using clear aligners versus rapid palatal expanders in mixed dentition patients Grete Kazlauskaite, Lithuanian University of Health Sciences, Lithuania	58
Title: Beyond the dental implant-peri-implantitis inveiled Gulnar Dara Sethna, Government Dental College & Hospital, India	53
Title: Corticotomy combined with BCGF and/or "sticky bone" or "sticky tooth": The baruti-demiraqi approach. Surgery meets orthodontics Gurien Demiraqi, Demiraqi Dental, Albania	20
Title: Understanding BCS implants and its clinical applications Hariharan Ramakrishnan, Educational and Research Institute, India	22
Title: Oral clefts-dental development anomaly. A review Isha Rastogi, Dr KNS MIMS Barabanki, India	54
Title: Prevention in health care and dentistry Jaap Boehmer, Rijnstate Hospital, Netherlands	24
Title: Long-term evaluation of soft tissue stability in class 1 defects treated with GBR technique Jamal Hassan Assaf, Federal University of Santa Maria, Brazil	55
Title: The consequences of the impacted maxillary incisor and their management in orthodontics John Watt, Kings College Hospital & Royal Surrey Hospital, United Kingdom	56
Title: Influence of growth on failure of inferior alveolar nerve block Kanika Gupta Verma, Teerthankar Mahaveer University, India	57
Title: Path to perfect smiles: How AI is reshaping dental diagnostics and treatment planning Khoa Le, Eyes of AI, Australia	25
Title: Comparative effectiveness of probiotics versus fluoride in preventing dental caries in patients undergoing orthodontic treatment: A systematic review Kotryna Kozlovskaja, Lithuanian University of Health Science, Lithuania	58
Title: Bridging the gap between professional development and patient care Laura Martin Bettencourt & Danielle Avila. L'Diamante Dental Coaching. United States	60

Title: Wide resections of tumors of the zygomatic-maxillary complex with new reconstruction techniques with microvascularized fibular flap Laurindo Moacir Sassi, Erasto Gaertner Hospital Cancer Center and Mackenzie Evangelical University Hospital, Brazil	26
Title: Dental consideration in patients under bisphosphonate and radiotherapy: Systematic review Lujain Al Sahman, King Saud University, Saudi Arabia	61
Title: Digital implantology: Using digital workflows for improved & predictable implant cases Marcus Cowan, DMD, United States	62
Title: Unusual presentation of a rare disease in a patient with special healthcare needs: Scurvy Melissa D Porter, Meharry Medical College, United States	63
Title: The MFS philosophy: A causal approach to craniofacial growth and development through myofunctional stimulation Monika Osko, Barcelona Orthodontic World Institute, Spain	65
Title: Tool-assisted myofascial release for the oral floor and tongue: Enhancing mobility and supporting frenulotomy Monika Osko, Barcelona Orthodontic World Institute, Spain	96
Title: Patient-centered care in maxillofacial prosthodontics Monika Sunil Jadhav, Goregaon Dental Centre, India	66
Title: Prevention meets policy: Transforming oral health through innovation & public health integration Najat A. Rabbo J S Alyafei, Primary Health Care Corporation, Qatar	67
Title: The fight against tobacco: Bridging oral health and public health. How India does it! Naval Ghule, Goregaon Dental Centre, India	68
Title: Endodontics in geriatrics patients Pantelejmon Trpchevski, Medical University of Varna, Bulgaria	69
Title: Dealing with peri-implantitis: An insight to various treatment regimens Preetinder Singh, Academy of Oral Surgery, United States	28
Title: Sensory processing disorders – A great barrier in treating special children R Kavitha, SRM University, India	70

Title: Significance of understanding burnout among dental professionals Ramesh Nagarajappa, The Oxford Dental College, India	72
Title: Embracing digitalization-stay ahead in modern dentistry Richa Gupta, Medical Writer, United States	73
Title: Antimicrobial performance of commercial antiplaque/antigingivitis formulations Robert L Karlinsey, Custom Dental Formulations, LLC, United States	74
Title: Plaque glycolysis and regrowth methods: What it is, why it is important, and how it can help your research and formulation endeavors Robert L Karlinsey, Custom Dental Formulations, LLC, United States	98
Title: The synergy in functional load of short dental implants and fiber-reinforced substructures in fibula transplants Rolf Ewers, Medical University of Vienna, Austria	29
Title: Anterior Veneers Preparation: A Practical Guide Rusul Yaseen, Cosmetic Dentist, United Arab Emirates	75
Title: Correlation analysis of the shear bond strength and adhesive remnant index in orthodontic adhesive systems: In-vitro study Rytis Vaitieknas, Lithuanian University of Health Sciences, Lithuania	90
Title: Radiographic evaluations of zygomatic implants Sanaz Heidarkhan Tehrani, Islamic Azad University of Medical Sciences, Iran (Islamic Republic of)	76
Title: A snapshot of basal cell carcinoma cases treated at the Great Western Hospital: Insights from the Wiltshire population Sara Massraf, Great Western Hospital Swindon, United Kingdom	92
Title: Tips and tricks of ceramic veneers Shveta Setia Thareja, SGT University, India	77
Title: Facial trauma updates 2025 Steven J Traub, American Institute of Oral Biology, United States	30
Title: Modern Temporomandibular Joint (TMJ) surgical treatment Steven J Traub, American Institute of Oral Biology, United States	31
Title: Immediate post-extraction molar implant placement Steven J Traub, American Institute of Oral Biology, United States	78

Title: An audit exploring the compliance in the general dental practice setting to taking radiographs in the paediatric population Soniya Singarayer, King's College Hospital, United Kingdom	79
Title: 'I thought I was being knocked out': An exploration of patients' understanding of conscious sedation prior to oral surgery treatments Soniya Singarayer, King's College Hospital, United Kingdom	94
Title: Two novel and unpublished cephalometric factors used in the screening and diagnosis of TMD and OSA Viet Nghiem, Independent Clinical Researcher, United States	80
Title: Myofunctional therapy in pediatric patients: A clear approach to craniofacial development for a healthy and functional smile Vincenzo Giorgino, Studio Giorgino SRL, Italy	82
Title: Oral bacteria detected in catheterism samples by patients with angina or acute myocardial infarction Vitoldo Antonio Kozlowski Junior, Ponta Grossa State University, Brazil	32
Title: Gingival angiosarcoma: A rare site of metastatic disposition Zachary Sinagra, Sir Charles Gairdner Hospital, Australia	93
Title: Models to assess microbial dysbiosis and oral microbiome transplantation Zvi Loewy, New York Medical College, United States	34



Dr. Bennete Fernandes

Faculty of Dentistry, SEGi University, Malaysia

Precision in prevention: The iTOP approach to periodontal health

Periodontal disease remains a global health challenge, affecting millions and contributing to systemic conditions such as cardiovascular disease and diabetes. Traditional preventive strategies often fail due to poor patient compliance, lack of personalized education, and ineffective oral hygiene techniques. The concept of Individually Trained Oral Prophylaxis (iTOP) offers a paradigm shift—focusing on precision, personalization, and proactive intervention to enhance periodontal health outcomes.

iTOP is a clinically backed, evidence-based approach emphasizing individualized training, proper techniques, and motivational reinforcement to ensure sustainable oral hygiene practices. Unlike conventional methods, iTOP employs personalized prophylactic training, integrating hands-on instruction with tailored tool selection to maximize plaque control and minimize periodontal disease risk. This approach aligns with the principles of biofilm management, minimal intervention dentistry, and patient-centered care, ensuring that preventive efforts are both efficient and long-lasting.

Biography



Dr. Bennete Fernandes studied Periodontology at the prestigious Rajiv Gandhi University of Health Sciences (RGUHS), Bengaluru, India, and completed his Masters in 2004. He has nearly 20 years of academic and clinical experience. He was awarded an honorary Ph.D. degree in 2021 by the International Internship University (IIU) and another in 2022 by Wisdom University. He is a member of at least 50 different organizations worldwide. After 11 years of working in India with his final stint as a Professor at Mangalore, India, he shifted base to Malaysia and is currently attached to SEGi University for the past 9 years. He has published nearly 40 research articles in peer-reviewed and indexed journals, has 4 books as co-author, & also 8 patents as a coauthor.

This presentation will explore the foundations of iTOP, its role in behavioural modification, and its impact on clinical outcomes through recent research and case studies. The discussion will highlight the importance of precision in prevention—leveraging individualized coaching, ergonomic oral hygiene tools, and evidence-based methodologies to empower patients in maintaining optimal periodontal health.

By integrating iTOP into routine dental practice, clinicians can enhance patient compliance, reduce the burden of periodontal disease, and promote long-term oral and systemic health. This lecture aims to bridge the gap between theory and practice, providing dental professionals with actionable insights into implementing iTOP effectively in daily clinical settings.

David G Gillam

Barts and The London School of Medicine and Dentistry, Queen Mary University of London (QMUL), UK

Innovation of novel products for the treatment of dentine hypersensitivity: A personal journey

he development of products for the dental market is a complex process requiring numerous stages of development from the laboratory to the clinical or consumer environment. There is no guarantee of success since very few products enter into the consumer market. As a clinician, I have been involved in dental research over the last 35 years, initially on undergraduate and postgraduate research projects as well as conducting both laboratory and clinical studies, working in Industry and finally being involved in developing dental materials in the laboratory for the commercial market. Research requires teamwork expertise, patience as well as having both professional and industrial collaboration to achieve translation of the original concept into the consumer market. The aim of this presentation is to update participants on the novel products that have been developed in a university environment and successfully launched into both the consumer and clinical environment. One of these products is a bioactive glass (BioMinF®) which has been optimized specifically for use as an additive for toothpaste in the treatment of dentine hypersensitivity and remineralization of the early caries lesion. Following laboratory evaluation and subsequent clinical trials the product is now classed as medical device (Class 2a) and distributed in numerous countries. Other products have been developed include

Biography



David G Gillam graduated from Edinburgh Dental School in 1977 and have been involved in Dentistry over the last 45 years. He has worked in both clinical practice and in University Dental Hospitals as well as in Industry (1998-2001) initially with SmithKline Beecham and subsequently with Block Drug Company from 2003 to 2008, He worked with a Clinical Research Organization as a Research Dentist, and He was previously a full-time Clinical Reader (Associate Professor) in Translational Research in Relation to Dentistry at the Bart's and the London School of Medicine and Dentistry QMUL in London (2009-2022). Currently he is a part-time Professor at QMUL, although he is no longer practicing dentistry. His main research interest is in Periodontology particularly, the Management of Dentine Hypersensitivity, although He has developed an interest in the development of dental materials for both professional and consumer use. He has published over 100 papers on numerous dental topics as well as contributing to several books as Editor and several book chapters as a contributor.

Biomin C (a chlorinated-non-fluoride toothpaste), an adhesive orthodontic varnish and a fluoride toothpaste for professional use (Biomin Restore Plus). The advantage of a bioactive glass product is that it enables the fluoride within the glass to dissolve into the saliva over time (up to twelve hours) and provides a fluorapatite layer on the tooth surface that is resistant to acid attack. Further development in investigating other products for use in remineralization and dentine hypersensitivity therapies is ongoing.

Gurien Demiraqi^{1*} PHD, DDS, MS, FIADFE, PHD. MS; Edlira Baruti Papa² DDS. MS; Eriola Noçka²

¹Department of Dentistry, Albanian University, Tirana, Albania; DemiraqiDental, Tirana, Albania

²Department or Dentistry, American University of Tirana, Tirana, Albania; DemiraqiDental, Tirana, Albania

Corticotomy combined with BCGF and/ or "Sticky Bone" or "Sticky Tooth". The baruti-demiraqi approach. Surgery meets orthodontics

Orticotomy has been utilized with varying degrees of success to expedite orthodontic movement; however, a clearly defined protocol for its application remains absent. This gap underscores the necessity for the development of a comprehensive protocol. The history and procedural intricacies of such treatments are elaborated upon in both orthodontic and surgical lectures. A thorough review of current literature and the outcomes achieved is also presented.

Aim: The objective of this lecture is to introduce a decadelong clinical study employing the corticotomy procedure in conjunction with Blood Concentrated Growth Factors (BCGF) plus "Sticky Bone" and/or "Sticky Tooth," the modified PAOO approach known as developed by Dr. Edlira Baruti and Dr. Gurien Demiraqi. This initiative aims to establish a clearly defined protocol encompassing diagnosis, indications, treatment planning, and expected outcomes.

Biography



Gurien Demiragi Graduated in dentistry in the Faculty of Dentistry, Tirana University. He Specialized in Implantology and OMF Surgery, Germany. Since 2007, He has been a pedagogue and lecturer in oral surgery; OMF surgery; oral anesthetics and implantology. From 2009 to 2015 he served as the head of the OMF surgery cathedra in the Dentistry Department, Faculty of Medical Sciences of the Albanian University. From 2010 Master and later PHD in oral implantology in the Faculty of Dentistry, Tirana University. He is an International Speaker, Author and coauthor of many books, also many articles. He is the Editor of several dentistry related magazines. he is also the Organizer of courses. Maintains the private practice at the policlinic "DemiraqiDental". He is the Inventor of the "Sticky Tooth" grafting material and a Co-inventor of the Baruti-Demiragi approach, reflecting his contributions to advancing dental and surgical techniques.

Materials and Methods: In this study, corticotomy was performed alongside BCGF and/or "Sticky Bone" or "Sticky Tooth" techniques on patients presenting with insufficient bone and compromised root structures, as well as inadequate quantity and quality of gingival coverage. Surgical interventions were predominantly conducted under sedation, with the corticotomy predominantly applied to the buccal aspect of both the maxilla and mandible. Blood samples were obtained during the procedure using the Vacutainer system and processed via the VLAD centrifuge. Following the corticotomy, which was primarily executed using piezoelectric surgery, the bone surface was irrigated with autogenous serum and subsequently covered with autogenous white buffy coat (Cloud) enriched with CD34+ growth factors in a membrane format. A layer of "Sticky Bone," and when feasible, autologous "Sticky Tooth," was then positioned beneath the fibrin clot. Bracket bonding was completed prior to the surgical intervention, with orthodontic activation commencing immediately post-surgery and continuing biweekly thereafter.

Results: The outcomes of our protocol indicate that patients were initially evaluated two days post-surgery. The post-operative period was characterized by minimal edema across all cases, with only low dosages of analgesics, such as ibuprofen, required for a maximum of two days. The overall duration of orthodontic treatment ranged from 4 to 12 months, with follow-ups extending beyond five years, which included clinical evaluations and CBCT assessments.

Conclusion: The integration of corticotomy with BCGF resulted in significant benefits for all patients involved in the study: a reduction in orthodontic treatment duration, minimal pain and edema during the post-operative phase, and notable improvement in periodontal and gingival conditions. The use of "Sticky Bone" or, preferably, "Sticky Tooth" demonstrated substantial and stable enhancements in bone quality over time.

Hariharan Ramakrishnan

Thai Moogambigai Dental College and Hospital, Dr. MGR Educational and Research Institute, India

Understanding BCS implants and its clinical applications

Bicortical Screws (BCS/BECES), are entirely smooth surfaced implants increasingly used in intraoral applications, providing a stable anchor for dental prostheses and oral rehabilitation. Intraoral BCS implants are used to retain dentures, bridges, and crowns, improving oral function and aesthetics. They are particularly useful in patients with limited bone availability or instability of the prosthetic device.

Intraoral BCS implants are placed in the jawbone, (maxilla and mandible), integrating with the surrounding bone to provide a secure anchor for prosthetic devices. This innovative solution offers improved stability, comfort, and speech clarity. The implants are made from biocompatible materials, minimizing the risk of adverse reactions.

The use of BCS implants in intraoral applications has revolutionized oral rehabilitation, offering a reliable and effective solution for individuals with dental defects or tooth loss. With proper care, intraoral BCS implants can last for many years, significantly improving oral function and overall well-being.

This case series of BCS implants showcases various clinical situations that had been successfully managed.

Biography



Hariharan Ramakrishnan completed his B.D.S (Bachelor of Dental Surgery) from Ragas Dental College & Hospital, Chennai, Tamil Nadu, India, and his M.D.S (Master of Dental Surgery) in Prosthodontics and Implantology from Saveetha Dental College & Hospital, Chennai, India. He also holds a P.G.D.H.M (Post Graduate Diploma in Hospital Management) from Madurai Kamaraj University, Additionally, India. he completed a fellowship in Laser Dentistry from the World Clinical Laser Institute, USA, and earned a Certificate in BPS (Biofunctional Prosthetic System) from Cadet association with Schaan, Liechtenstein, in 2013. Hariharan has specialized training in corticoimplantology from International Implant Foundation, Munich, Germany, obtained in 2021, with expertise in immediate functional loading. He is a recipient of several prestigious awards, including the AKS Global Faculty Award in 2020 and the KTK Bharat Shiksha Gaurav Purushkar Award in 2021. He was honored with the "Best Educationist Award" on February 20, 2022, by the KTK Outstanding Achievers and Education Foundation in New

Delhi, India, and the "Best Researcher Award" on May 14-15, 2022, by the INSO Awards, International Research Awards on Science, Technology, and Management in Chennai, India. He also received the "Eminent Educationist of India Award" on November 22, 2022, by the KTK Outstanding Achievers and Education Foundation in New Delhi, India. In 2023, he was awarded the "Pride of India International Award" on February 19 by the same foundation. Additionally, he holds the "Cureus Laureate Title" conferred by the editor-in-chief of the American Journal Cureus (ISSN-2168-8184) for extraordinary contributions to the journal. Hariharan serves on the editorial boards of numerous national and international journals, including the Journal of Clinical Prosthodontics and Implantology (India), Online Journal of Dentistry and Oral Health (USA), Acta Scientific Dental Sciences (India), Journal of Dental Health and Oral Research (India), Austin Journal of Dentistry and Oral Disorders (USA), Dental and Oral Health (UK), Journal of Oral Health and Craniofacial Science (USA), Madridge Journal of Dentistry and Oral Surgery (USA), Dental Oral Biology and Craniofacial Research (Estonia, Europe, USA), Scientific Archives of Dental Sciences (USA), and the International Journal of Dental Medicine (USA). He is also a dedicated reviewer for various journals, including the Journal of Indian Prosthodontic Society, where he has reviewed over 25 articles since 2019. He has been invited to review for the Journal of Clinical and Diagnostic Research, Nature Journal -Scientific Reports, Springer Nature journals such as BMC Oral Health and Clinical Oral Investigations, Hindawi's Journal of Healthcare Engineering, and PLOS One. His contributions to academia and research highlight his exceptional expertise and dedication to the field of dentistry and oral health.

Dr. Jaap Boehmer DMD

Rijnstate Hospital, Arnhem, Netherlands

Prevention in health care and dentistry

In the Netherlands, prevention in medicare is important. In the presentation is shown how it is done in health care in general medicine. Specially in dentistry, the dental profession succeeded to get for the youth till 18 Years, nearly no decay. How did they do that? What is the role of the government and insurance companies? Also the public health organisations worked with the dentists. The lecture gives idea, what the dental profession can do in this field!

Biography



Dr. J. Boehmer Studied Dentistry in Utrecht N.L. and graduated as MS in 1964. He worked in the Rijstate Hospital Arnhem as special Dentist and treated 3000 Children, under 6 years, handicapped persons and drugaddict Patients, with rampant caries under General Anaesthesia. He gave presentations about Prevention in Dentistry on T.V. and at political parties in the Netherlands and on Congresses. From 1970 till 1980, he was a Member of the Board of the Dutch Dental Association. The Dental Hygienist was then introduced in the Netherlands.

Khoa Le^{1*}, Dr. Sen Le²

¹Eyes of AI, Chief Clinical Officer, Australia ²Eyes of AI, Chief Executive Officer, Australia

Path to perfect smiles: How AI is reshaping dental diagnostics and treatment planning

The integration of Artificial Intelligence (AI) into dental diagnostics and treatment planning marks a transformative era in modern dentistry. As patient expectations grow for precision and efficiency, AI emerges as a pivotal tool in enhancing clinical workflows, improving diagnostic accuracy, and personalising treatment strategies.

Leveraging deep learning algorithms, AI can analyse complex dental imaging modalities, such as OPGs, Small Film X-rays, Cone Beam Computed Tomography (CBCT) and cephalometric X-rays, identifying pathologies and structural anomalies with unprecedented precision.

This presentation explores the current advancements in AI-driven dental technologies, focusing on automated diagnostic tools and predictive treatment planning systems. We discuss the development and application of generative AI models to synthesise high-quality training datasets, overcoming data scarcity challenges. Furthermore, AI's role in early detection of oral diseases and orthodontic planning will be highlighted, demonstrating its impact on optimising patient outcomes and ensuring clinicians have the best-in-class visualisation tools.

By blending innovative technologies with traditional dental expertise, AI has the potential to redefine the patient experience, offering brighter smiles and better lives. This presentation aligns with the theme of modern dental solutions, showcasing the future of AI-powered precision care in dentistry.

Biography



Khoa Le is a seasoned Machine Learning Specialist, with over two decades of experience in quantitative analysis, advanced computational analytics, Artificial Intelligence (AI), and Machine Learning (ML). His expertise spans a wide range of domains such as supervised and unsupervised machine learning, reinforcement learning, computer vision, natural language processing, and deep learning. Backed by a solid academic background, Khoa holds a Bachelor's degree in Actuarial Studies and Commerce, as well as a Masters in Finance. Khoa has excelled in creating state-of-theart machine learning algorithms, specially tailored for various sectors including finance and healthcare, with a particular emphasis on enhancing the accuracy efficiency of computer vision systems for X-ray analysis.

Prof. Dr. Laurindo Moacir Sassi DD, MSc, PhD, ICD

Erasto Gaertner Hospital Câncer Center, Mackenzie Evangelical University Hospital, Pontificia Universidade Católica do Paraná – (Prof. Convidado), Brazil

Wide resections of tumors of the zygomatic-maxillary complex with new reconstruction techniques with microvascularized fibular flap

Introduction: Can lack of adherence to prevention be a factor contributing to large resections of mouth tumors and forcing the creation of new techniques for reconstruction purposes?" DIRSCHNABE... SASSI, 2020, showed patients with actinic cheilitis on the lip where the percentage of cancer was 12.5%. Prevention is combined with the control of the emergence mainly of oral cancer, which we have observed in the estimate of the National Cancer Institute (INCA-2023). In the State of Paraná - Brazil, there was a decrease in new cases of mouth cancer in the estimate in the 2023/2025 triennium compared to the 2018/2019 biennium. According to Sassi, et al 2024, there was an emphasis on oral cancer prevention since 1989, almost four decades in the State of Paraná, corroborating the INCA data. We can believe that large resections of the facial bones are linked to failure to prevent mouth lesions. They are extended to the prevention of adverse effects of radiotherapy and especially osteoradionecrosis (SCHEPANSKI; SASSI; ARAUJO, 2024). The resection of facial tumors that affect the maxilla, mandible and zygomatic complex has left significant sequelae and it seems to us that they make surgeons more sensitive to their destruction. Each surgical procedure is a challenge, especially when there is a large reconstruction to be performed due to the anatomical defect created by the resection of cancer in the head and

Biography



Prof. Dr. Laurindo Moacir Sassi, DD, MSc, PhD, ICD is a distinguished expert in Oral & Maxillofacial Surgery. He currently serves as the Department's Chief Oral and Maxillofacial Surgery (Chief in Chair Oral and Maxillofacial Surgery) at the Erasto Gaertner Hospital Center-Curitiba-PR-Cancer Brazil; Residence Coordinator of (CTBMF)-Erasto Gaertner Hospital Cancer Center. He is also Member of the (CTBMF) Service in the Department of Otorhinolaryngology, Mackenzie Evangelical University Hospital-PR; Guest professor at the Pontifical Catholic University of Paraná; Member of the Brazilian College of Oral and Maxillofacial Surgery and Traumatology; Member of the Brazilian Society of Stomatology and Oral Pathology-SOBEP. He also serves as a reviewer for the International Journal of Oral & Maxillofacial Surgery; International College of Dentists (ICD). He is the author of two books: "Manual Prático para Desenvolvimento de Projetos de Pesquisa e Teses". Publishing company: Santos. 2011; Book Author: "25 anos de prevenção de câncer bucal no Paraná: Hospital Erasto Gaertner (1989 a 2013)" Publishing company: Appris. 2013.

neck region, or left by osteoradionecrosis, which motivates the development of new reconstruction techniques. The possibility of using microvascular flaps for reconstruction has improved the quality of life of cancer patients. Facial bone reconstruction with a microvascularized fibular flap is a routine procedure in our institution, which often leads us to seek alternatives to provide greater comfort to patients, covering issues of return to phonation, aesthetics, and function of the stomatognathic system, which is a challenge for each patient, since the main objective is to improve the patient's quality of life and provide reintegration into society.

Method: 1- For patients who require complementary therapy with radiotherapy, there is a safety period to perform or indicate radiotherapy treatment. With the variables of greater contact surface between the segments, which facilitates bone neoformation and flap stability, thus reducing the chance of loss of bone segments or necrosis.

2-(New technique) after collecting the free fibular flap in the standard form, differentiated osteotomies, modeling (prototyping) and arrangement of the fibular bone segments are performed in the recipient site of the middle third of the face (SASSI, 2022).

Result: This variable in the reconstruction technique of the microvascularized fibula flap left a satisfactory result for the masticatory function, phonation and aesthetics of the stomatograthic apparatus. We contributed to the return of the anatomical function of the maxilla, the zygomatic complex, in addition to aiding in the recovery of newly formed bone tissue.

Conclusions: This new technique contributes mainly when we fail to prevent oral cancer and the adverse effects of radiotherapy, where great mutilation occurs in the areas and we are obliged to treat and reconstruct it. The technique presented has the advantage of requiring only one flap in the reconstruction, thus solving the technical difficulties of the middle third of the face. It is believed that the technique described can contribute to the return of the anatomical function of the patient's maxilla and zygomatic complex, in addition to helping in the recovery of newly formed bone tissue.

Preetinder Singh

Academy of Oral Surgery, United States

Dealing with peri-implantitis: An insight to various treatment regimens

Alikely to show signs of peri-implant diseases with varying degrees of severity throughout the lifespan of the implants, clinicians will be confronted with peri-implant complications requiring appropriate management. The ideal management of peri-implant infections should focus both on infection control of the lesion, detoxification of the implant surface, and regeneration of lost support. Treatment options can be surgical or nonsurgical. Host's medical status, defect configuration, aesthetic outcome, ability to access for plaque control post-treatment, and the patient's wishes are key factors to consider. The purpose of this presentation is to provide a contemporary synopsis on the management of peri-implantitis with emphasis on explantation.

Biography



Preetinder Singh (MDS) working as a Senior Professor in Department of Periodontology & Oral Implantology in SDD Hospital & Dental College, India and as a Senior Consultant in various dental offices around the country. Dr. Singh is an Ambassador, American Academy of Oral Surgery. He is the Editor in Chief of Journal of Periodontal Medicine & Clinical Practice and Associate Editor of various other famous journals. He was awarded the Best Graduate Award and Gold Medal

Kurukshetra University, Haryana, India during his BDS, based on his outstanding academic record. He has a keen interest in academics, research and clinical practice. He has around 55 research publications in various national and international journals of repute. Dr. Singh is an invited senior reviewer for 5 leading international journals indexed in PUBMED. He also has three textbooks published internationally, attached to his career till date. Dr. Singh has a great interest in periodontal & implant research field and is an invited Keynote speaker for corporate lectures on his expertise in dentistry at a national & international level. He also holds a place of doing the first study in India on use of recombinant PDGF in treatment of gingival recession defects. He is presently working on microsurgery, advanced Implantology, PRF, LANAP etc. Under his guidance and work, his department was awarded as the centre of excellence in dental implants in his state.

Rolf Ewers*, Vincent J Morgan, Mauro Marincola, Paolo Perpetuini

Emeritus Head of the University Hospital of Cranio-, Maxillofacial and Oral Surgery in Vienna/ Austria

The synergy in functional load of short dental implants and fiber-reinforced substructures in fibula transplants

This multi-center retrospective study evaluated the survival and success of short and extra short locking-taper dental implants placed in both maxillary and mandibular iliac crest-, fibula-, and scapula grafts.

A total of 49 patients were treated across five study sites and received 186 implants in iliac crest-, fibula-, and scapula grafted sites. Out of those patients, 34 received prostheses. Kaplan-Meier survival analysis was used to assess the survival and success rates of both implants and prostheses. Multivariate Cox regression was used to correlated study covariates to implant survival outcomes.

The overall thirteen-year implant survival rate was 86.2% (95% confidence interval: 81.6-94.0%), while the implant success rate was 78.9% (95% confidence interval: 62.3-87.7%.) The prosthesis survival rate at 12.8 years after prosthesis insertion was 89.4% (95% confidence interval: 62.5-95.4%); while the prosthetic success rate was 81.2% (95% confidence interval: 62.0-93.7%.) Implant placement in the mandible, patient age, systemic conditions, and irradiation after implant surgery were correlated with reduced implant survival; while maxillary implant placement, antiresorptive drug use, and tooth loss due to trauma were correlated with improved survival.

Biography



Professor Rolf Ewers is currently Chairman of the CMF Implant Institute Vienna, Austria Raised in Germany, he studied Medicine and Dentistry in Freiburg, Germany. His Residency was started as a first year Surgery Resident at the Downstate University in Brooklyn, USA, continuing his training as a Cranio-Maxillo-facial and Oral Surgeon and finishing with his PhD in Freiburg, Germany. Since 1980, he was for 9 years Deputy Chairman of the University Hospital for Oral-Maxillofacial Surgery in Kiel, Germany. Until October 2012, for 23 years he was the Chairman of the University Hospital of Cranio-Maxillofacial and Oral Surgery in Vienna, Austria.

Short and extra short locking-taper dental implants provide a viable solution for the restoration of dentition in patients receiving iliac crest-, fibula-, and scapula grafts for maxillary or mandibular reconstruction.

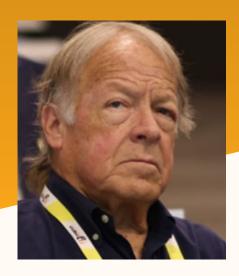
Steven J Traub

American Institute of Oral Biology, United States

Facial trauma updates 2025

What every dentist and medical practitioner should know about facial injury evaluation, treatment, and long-term outcomes related to facial bone fractures, soft tissue injuries, and associated dental-related problems. Special emphasis will be paid to airway protection, gunshot wounds, stab wounds, lacerations, nerve injuries, and complications of wound healing.

Biography



Steven J. Traub is Albuquerque native. He is a graduate of the University of New Mexico and the Creighton School of Dental University Science. He completed residency in Oral & Maxillofacial Surgery at Cook County Hospital in Chicago. Dr. Traub returned to Albuquerque in 1981 whereupon

he started his private practice. Dr. Steven J. Traub is a life fellow of the American Association of Oral & Maxillofacial Surgeons (ACOMS), the American College of Oral & Maxillofacial Surgeons (ACOMS) and the International Association of Oral & Maxillofacial Surgeons (IAOMS). Dr. Traub is a member of numerous other professional societies and organizations, including the American Dental Association (ADA), and is on the board of directors of the American Institute of Oral Biology (AIOB). Dr. Traub specializes in oral & maxillofacial surgery, including removal of wisdom teeth, extractions on patients of all ages, dental implant placement, jaw pathology, Temporomandibular Joint (TMJ) surgery, and facial trauma and reconstruction. Dr. Traub is also involved with various community organizations and is happy to be able to give back. He is most actively involved in Presbyterian Healthcare's 'Laughter is The Best Medicine' charity. In his free time, Dr. Traub likes to travel and spend time with his large family.

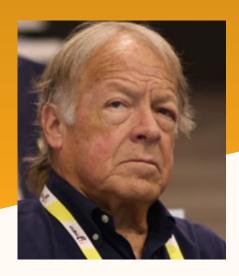
Steven J Traub

American Institute of Oral Biology, United States

Modern TMJ (Temporomandibular Joint) surgical treatment

An indepth presentation of the facts that negate many of the myths often propounded regarding TMJ surgery. Attention is focused on proper evaluation and diagnosis, nonsurgical management of Myofascial Pain Dysfunction (MPD) syndrome, and surgical decision making for state of the art surgery for TMJ meniscal pathology and degenerative joint disease requiring reconstruction. This is a historical review of over 40 years of private practice experience.

Biography



Steven J. Traub is Albuquerque native. He is a graduate of the University of New Mexico and the Creighton School of Dental University Science. He completed residency in Oral & Maxillofacial Surgery at Cook County Hospital in Chicago. Dr. Traub returned to Albuquerque in 1981 whereupon

he started his private practice. Dr. Steven J. Traub is a life fellow of the American Association of Oral & Maxillofacial Surgeons (ACOMS), the American College of Oral & Maxillofacial Surgeons (ACOMS) and the International Association of Oral & Maxillofacial Surgeons (IAOMS). Dr. Traub is a member of numerous other professional societies and organizations, including the American Dental Association (ADA), and is on the board of directors of the American Institute of Oral Biology (AIOB). Dr. Traub specializes in oral & maxillofacial surgery, including removal of wisdom teeth, extractions on patients of all ages, dental implant placement, jaw pathology, Temporomandibular Joint (TMJ) surgery, and facial trauma and reconstruction. Dr. Traub is also involved with various community organizations and is happy to be able to give back. He is most actively involved in Presbyterian Healthcare's 'Laughter is The Best Medicine' charity. In his free time, Dr. Traub likes to travel and spend time with his large family.

Ricélia Cecília Possagno¹, Francisco Isaak Nicolas Ciesielski¹, Chigueyuki Jitumori², José Carlos Ferreira da Rocha³, Elise Souza dos Santos Reis^{4,5}, Paulo Bezerra de Araújo Galvão⁵, Elerson Gaetti Jardim Junior⁶, Vitoldo Antonio Kozlowski Junior^{1*}

¹Department of Dentistry, Ponta Grossa State University, Ponta Grossa, Brazil

²Department of Dentistry, Centro de Ensino Superior dos Campos Gerais, Ponta Grossa, Brazil

³Department of Informatics, Ponta Grossa State University, Ponta Grossa, Brazil

⁴Department of Medicine, Ponta Grossa State University, Ponta Grossa, Brazil

⁵Department of Hemodynamics, Hospital Santa Casa de Misericórdia de Ponta Grossa, Ponta Grossa, Brazil

⁶Department of Pathology and Clinical Propedeutics, School of Dentistry, São Paulo State University, Araçatuba, Brazil

Oral bacteria detected in catheterism samples by patients with angina or acute myocardial infarction

Onsiderable evidence support a set of plausible mechanisms by which oral bacteria may directly or indirectly contribute to acute cardiovascular disease. Coronary artery disease occurs when there is blockage in one or more of the major arteries that supply blood to the heart; these obstructions can be partial or total and typically

Biography



Prof. Dr. Vitoldo Antonio Kozlowski Junior, Pos Doc, Ph.D., M.Sc., D.D.S. has completed his Pos Doc in Periodontology, The Forsyth Institute. Harvard University, Boston, USA, and Ph.D., M.Sc. in Dentistry/Pharmacology from the University of Campinas, Brazil. He is the Associate Professor of the Ponta Grossa State University, Brazil, in the Department of Dentistry and ACUBENS Research Laboratory, Biological, and Health Sciences Division. Qualification Pharmacology, Clinical in Pharmacology, Periodontology, Clinical Therapeutics, integrative and complementary practices for oral health in the area of Phytotherapy by the Brazilian Federal Council of Dentistry. He has published more than 50 papers in reputed journals and has been serving as an editorial board member of repute. He has shown more than 300 conferences in scientific meetings.

result in chest pain, especially when the individual is under stress and effort. The existence, location, and extent of the obstruction can be diagnosed with a selective coronary arteriogram, obtained by cardiac catheterization. In this study, the presence of Porphyromonas gingivalis, Prevotella nigrescens, Treponema denticola, Tannerella forsythia, Eikenella corrodens, Prevotella intermedia, Campylobacter rectus and bacterial Universal DNA were detected by real-time PCR, in atheromatous samples from coronary arteries obtained for catheterism examination. Fifty-nine patients with angina or acute myocardial infarction, confirmed through electrocardiogram, clinical characteristics and laboratory tests were evaluated by cardiac catheterization. Patients fulfilling the inclusion criteria were informed of the study and signed an informed consent form that was approved by the Ethics Committee in Research of Ponta Grossa State University n. 14170/08. Detection of oral bacteria was performed using universal and species-specific TagMan probe/primer sets. All reference strains DNA produced the expected amplicons by using the species-specific primers. DNA sequencing analysis of each bacterium from positive samples showed a similarity >95%. Total bacterial DNA was found in 93,22% of the catheterism samples. All oral bacteria except for the Prevotella nigrescens and Tannerella forsythia were detected. Treponema denticola was the most bacteria detected in 6,8% samples. Additionally, unidentified microbial DNA can be observed. In conclusion, it is possible identified oral bacteria in catheterism samples, demonstrated that oral bacteria can be direct or indirect involved in the angina and acute myocardial infarction.

Keywords: Atherosclerotic Diseases, Oral Bacteria, Atherosclerosis, Coronary Artery Diseases, Acute Myocardial Infarction, Angina.

Irene Berger¹, Shira Nahon¹, Dr. Zvi Loewy^{1,2*}

¹Touro University College of Pharmacy, New York, NY

²New York Medical College, Valhalla, NY

Models to assess microbial dysbiosis and oral microbiome transplantation

Innovative medical devices have enhanced health care and improved the overall quality of life. Although providing significant medical benefits, there are unfortunately a myriad of diseases that can be attributed to the presence of medical devices. Microbes can colonize on a medical device surface and cause infections, and at times can even lead to malfunction of the device. Microbial species are present either as planktonic cells or incorporated into biofilms. Biofilms evolve from the planktonic state and are characterized as dense micro-communities that grow on inert surfaces and encapsulate themselves with secreted polymers. When organisms form a biofilm, they are able to adapt to environmental change by altering their gene expression patterns. The biofilm structure and corresponding change in gene expression can protect the microbes from disinfectant agents or antibiotics. The resultant biofilm can pose a serious public health issue.

Biography



Dr. Zvi Loewy is a senior academic leader and an experienced global pharmaceutical-biotechnology executive. He leverages diversified background in big senior pharma management, biotech startup creation, academia. Dr. Loewy has served as a board member of the New Jersey Bioscience Center Incubator since 2010. Dr. Loewy's international experience includes leading research teams, spearheading the global penetration and commercial launch of healthcare products, and driving open innovation in the Middle East. He earned his Ph.D. in Molecular Biology from the Albert Einstein College of Medicine. Dr. Loewy holds over 25 issued patents.

While different types of medical devices harbor biofilms, dental prostheses are some of the most pervasive. The majority of the oral microbes are commensal organisms. Those that are pathogenic microbes can result in oral infections, and at times initiate systemic diseases. The physical nature of biofilms and the survival mechanisms they possess, whether phenotypic adaptability or genetic resistance, leave them impervious to antibiotic treatment. Given the lack of response to traditional antimicrobial therapy, biofilm infections currently pose a great challenge to the world of medicine and odontology.

In this study we focus on (a) the identification and characterization of a novel antimicrobial and (b) establishing a model dental experimental system to evaluate the antimicrobial.





Dr. Anya Rani SharmaNational Care Alliance & Manchester Foundation Trust, Manchester, UK

Food for thought

ood for Thought" is a quality improvement initiative designed to weave dietetic expertise into the management of dental nutrition within the Community Dental Service (CDS) for Special Care Dentistry (SCD). This project addresses the complex dental and nutritional needs of special care patients, particularly those with neurodiversity and sensory sensitivities who face higher risks of dental issues. Standard dental care often misses the impact of dietary needs, sensitivities, and behavioural factors on oral health in these patients, creating a gap in comprehensive care.

The goal of this initiative is to elevate patient-centred care by integrating dietitian colleagues into preventative dental agendas, fostering meaningful multidisciplinary collaboration to shape tailored dietary recommendations that support both dental and nutritional health. By working together, the dental and dietetic teams aim to provide more targeted, holistic advice—empowering patients, educating dental staff, and ultimately optimizing health outcomes.

This project places the needs of each patient at the forefront, offering individualized dietary guidance that respects sensory sensitivities and behavioural preferences. For neurodiverse patients, this can mean creating adaptable, supportive dietary strategies that meet their specific requirements without overwhelming them. By tailoring recommendations to fit these sensitivities, we can increase adherence and improve oral health outcomes in a meaningful way.

A successful pilot could pave the way for a fully integrated care pathway, including dietitian-led clinics running alongside regular dental examinations. This model would allow ongoing dietary support to become a standard component of routine care, rather than a secondary consideration. Such a system would promote diet as an essential element of individualized care plans for vulnerable groups, ensuring that nutritional health is always considered as part of the broader approach to oral care.

If "Food for Thought" proves effective, it could serve as a blueprint for collaborative care in SCD, with potential for adoption across other dental services. This integration of dietetic expertise into dental care not only recognizes the unique needs of special care patients but also redefines what patient-centred, preventative dental care can look like in the future.

Biography

Dr. Sharma completed her dental degree at the University of Manchester, followed by training in Manchester, building her clinical foundation. She then pursued an Academic Clinical Fellowship at the University of Liverpool in Dental Public Health. Currently, she is in Dental Core Training at Manchester Dental Hospital, focusing on complex restorative work, and Special Care Dentistry in Community Dental Services. Passionate about breaking socioeconomic barriers, Dr. Sharma advocates for accessible dental care and widening access to education for patients and professionals alike.



Dr. Arpita ShahGoregaon Dental Centre, Jain Hospital, Mumbai, India

Breathing easy: The role of nitrous oxide in stress-free pediatric dentistry

litrous Oxide (N₂O), commonly known as "laughing gas," has been a cornerstone in pediatric dentistry for over a century, offering a safe and effective method to alleviate anxiety and discomfort during dental procedures.

This presentation will provide an in-depth exploration of N₂O sedation, focusing on its pharmacological properties, clinical applications, safety protocols, and the latest advancements enhancing its efficacy in pediatric dental care.

We will begin by examining the pharmacodynamics of nitrous oxide, highlighting its rapid onset and quick recovery time, which make it particularly suitable for pediatric patients. The gas induces a state of conscious sedation, allowing children to remain responsive while experiencing reduced anxiety and discomfort.

The discussion will focus on the clinical advantages of N₂O sedation, including its efficacy in reducing pain perception and suppressing the gag reflex, facilitating a smoother dental experience for both the patient and the practitioner. Its role in managing dental anxiety, improving patient cooperation, and enhancing the overall quality of care will be explored.

Ensuring patient safety is paramount. We will delve into the safety profile of nitrous oxide, discussing proper patient selection, dosage control, and monitoring during administration. Emphasis will be placed on the importance of informed consent and effective communication with both patients and their guardians about the sedation process.

The presentation will also highlight recent advancements in N_2O delivery systems, such as the development of nasal hoods with improved scavenging capabilities to minimize environmental exposure. Additionally, ongoing research into the combined use of nitrous oxide with other sedative agents to enhance efficacy and patient comfort will be discussed.

By the end of this presentation, attendees will have a comprehensive understanding of how nitrous oxide sedation can be integrated into pediatric dental practice to enhance patient comfort, improve procedural efficiency, and maintain high safety standards. This knowledge will empower dental professionals to utilize N_2O sedation effectively, contributing to more positive dental experiences for children and fostering a foundation for lifelong oral health.

Biography

Dr. Arpita Shah is an accomplished pediatric dentist practicing at Goregaon Dental Centre, Bhatia Hospital, and Conwest Jain Hospital in Mumbai, India. With over seven years of experience in dentistry, she has been credited with prestigious honors such as the ICMR (Indian Council of Medical Research) MDS Grant and the Ratan Tata Scholarship. Dr. Shah has won accolades, including the MUHS State-Level Scientific Research Forum Award, and has bagged more than 25 prizes for oral paper and poster presentations since 2018. A recognized speaker for nitrous sedation training programs, Dr. Shah also serves as a senior mentor for the CCRP (Clinical Case Report Presentation) program at Goregaon Dental Centre. Her commitment to advancing pediatric dentistry and creating stress-free dental experiences has solidified her reputation as a leading expert in her field.



Dr. Arshia Rashid Baig*, Dr. Anuja Ikhar

Associate Professor, Dept of Conservative Dentistry & Endodontics, Sharad Pawar Dental College, Sawangi (Meghe), Wardha-India

The future of dentistry: Artificial intelligence

Artificial Intelligence (AI) has shown remarkable growth over the past few years. Advancement in digitized data acquisition, machine learning and computing organization, applications of AI are intensifying into those areas which are confined to human specialists. When applied to medicine and dentistry, AI has incredible ability to enhance patient care and reform such health care fields. In Dentistry, AI is considered for various purposes, precisely identification of normal and abnormal structures, analysis of dental images followed by diagnosis of diseases and predicting possible treatment results.

Enormous increase in patient information documentation, there is need for utilizing intelligent software to assemble and document this data. From the basic phase of recording a patient's history to data handling followed by extracting the data for diagnosis, artificial intelligence has countless applications in dental field. Artificial intelligence is not a replacement of a dental surgeon but it is important to be accustomed with the possibility to integrate such technology advancement in future for benefit of dental practice. This presentation describes the current and future applications of AI in various specialties of dentistry.

Biography

Dr. Arshia R Baig BDS, MDS (Conservative Dentistry and Endodontics)}, currently working as a Reader (Associate Professor) & pursuing PhD (Artificial Intelligence in Dentistry) in the Department of Conservative Dentistry and Endodontics at Sharad Pawar Dental College & Hospital, Sawangi (Meghe), Wardha. She completed her BDS in the year 2010 and MDS (Conservative Dentistry and Endodontics) in the year 2015 from Maharashtra University of Health Sciences, Nashik (India). She is a Certified, approved adjunct faculty under Societat Gestora Formacio Terciaria Slu, Andorra (Europe). Dr. Arshia R Baig is the Editorial review board member in Journal of Operative Dentistry and Endodontics, Reviewer in Journal of International Society of Preventive and Community dentistry, BioMed Central Oral Health Journal (London, UK) and Journal of Natural Science, Biology and Medicine. She has 13 Publications to her credit.



Balkis Khadhraoui^{1,3*}, Zeineb Riahi^{1,3}, Zohra Nouira^{2,3}, Dalenda Hadyaoui^{2,3}, Belhassen Harzallah^{2,3}

¹Assistant Professor, Department of Fixed Prosthodontics, Faculty of Dental Medicine, University of Monastir, Monastir, Tunisia

²Professor, Department of Fixed Prosthodontics, Dental Faculty of Monastir, University of Monastir, Tunisia

³Research Laboratory of Occlusodontics and Ceramic Prosthesis LR16ES15, Tunisia

Ceramic overlay to restore a heavily compromised tooth: A case report

Introduction: Restoring damaged or non-vital teeth can be complex, making direct restorations particularly challenging. As an alternative, indirect ceramic restorations, such as onlays and overlays, have gained significant popularity due to their ability to meet patient's' growing aesthetic demands and their minimally invasive nature.

Case Description: A 47-year-old female patient was referred to the department of fixed prosthodontics at the faculty of dental medicine of Monastir. After clinical examination, The patient presented with a coronal fracture of the left maxillary second molar. The fracture level was juxta-gingival with remaining buccal cusps. The tooth had undergone endodontic treatment more than five years ago. The chosen solution was a ceramic overlay to preserve the remaining dental structures. A reinforced lithium silicate ceramic was selected for the restoration.

Discussion: Although full-coverage crowns remain the gold standard for restoring endodontically treated teeth, they necessitate substantial removal of healthy dental tissue. Alternatively, onlays, and particularly overlay restorations, provide a more conservative approach, allowing the preservation of sound tooth structure. Adhesive overlays not only protect coronal structure and maintain the integrity of root canal treatment but also reinforce the remaining dental tissues while achieving optimal aesthetics, form, and function.

Conclusion/Clinical Significance: Current evidence supports indirect ceramic restorations bonded with adhesive resin cement as a reliable solution for rehabilitating teeth weakened by extensive structural loss. However, careful case selection and appropriate material choice are crucial for achieving predictable and long-lasting clinical outcomes with overlays.

Biography

Dr. Balkis Khadhraoui studied Dental Medicine at the Faculty of Dental Medicine of Monastir, University of Monastir, Tunisia and graduated in 2017. She completed 4 years of residency in fixed prosthodontics at the Faculty of dental Medicine of Monastir. She defended her doctoral thesis in dental medicine in 2022 and obtained her specialization diploma in prosthodontics in 2023. Currently, she is an assistant Professor in prosthodontics at the Faculty of Dental Medicine in Monastir. She is member of the Research Laboratory of Occlusodontics and Ceramic Prosthesis LR16ES15 of the University of Monastir since 2019.



Dr. Bharat JoshiDepartment of Periodontology & Implantology, MMCDSR, Ambala, Haryana, India

Traumatic lesions of lip and gingiva - Appearance and management

njuries to lip and gingiva are commonly observed as a result of either trauma or due to some irritation which may be local or systemic. These injuries often result in lot of discomfort and pain to individuals thereby causing mastication difficulties and unpleasant looks. The appearance of these injury based lesions may be either sessile or pedunculated depending upon nature and involvement. These lesions affect younger and middle age group and usually do not undergo malignant transformation. The effect of these lesions are oral functional disability and systemic disturbances. Irritational injuries to lip and gingiva include a variety of lesions namely lipoma, mucocele, fibroma, pyogenic granuloma and Peripheral Ossifying Fibroma (POF). The incidence and gender prediction is variable and it can affect the individuals at any age. Clinical management of these lesions involve variety of procedures like surgical excision, electrocautery or lasers. Although every procedure has its own merits and demerits, yet the selection of the required procedure depends upon variety of factors ranging from post-operative discomfort, cost effective ness and re-occurrence rate. The purpose of this presentation is to depict clinical features of various type of growths that clinicians may encounter during their day-to day life and the treatment skills that are required with full knowledge and accuracy. It will also be useful in accurate diagnosis and precise treatment protocols for further follow up and preventive strategies.

Biography

Dr. Bharat Joshi holds Master's degree in Periodontology & Oral Implantology and has been working as Reader in MMCDSR, Haryana, India. He has experience of 4.5 years teaching to BDS, MDS and Dental Hygienist Students. Dr. Bharat has published his articles in various National & International Journal Publications (16 Publications). Currently, He is a reviewer in Clinical and Medical research journal (Athena Publications) and editorial board member with Archives of dental research. He is former assistant editor with Indian journal of case reports (100 articles reviewed) Acta Scientifica Dental Science-(2 articles edited & 4 short opinions published) & Ecoronica dental sciences UK (2 short opinions published). In addition to it, he has 6 publications of patient interest in iclinic. com.



Brynn L. Leroux DDS, D-ABPD D-ABLS
Associates in Pediatric Dentistry, Baton Rouge, LA, USA

TOTS, lasers, airway and pediatric dentistry

This presentation reviews the background and significance of tethered oral tissues and shows numerous case studies of pediatric patients treated with a combination of frenectomies, therapy, and bodywork to help with feeding, speech, sleep, breathing, growth and development, dental health and more. Cases include infants, children, adolescents and teenagers and were performed using various levels of sedation specific to what was required to safely and successfully accomplish the procedure in each individual patient. Pre-op and post-op histories are reviewed, including collaboration with therapists as needed based on each patient's individual needs.

Keywords: Pediatric Dentistry, Laser, Frenectomy, Infant Frenectomy, Sedation, CO₂ Laser, Tongue Tie, Lip Tie, Buccal Tie, Airway.

Biography

Dr. Brynn Leroux is a graduate of Louisiana State University School of Dentistry and the Pediatric Dental Residency Program at the Medical University of South Carolina. Dr. Leroux is a partner in Associates in Pediatric Dentistry, a group practice in Louisiana, USA with 4 locations serving the Greater Baton Rouge area. She is a Diplomate of the American Board of Pediatric Dentistry and the American Board of Laser Surgery. After being personally affected by tongue tie and sleep disordered breathing, Dr. Leroux has taken a special interest in tethered oral tissues, airway centered dentistry, sleep medicine, and interceptive orthodontics. She is a TOTS trained professional, an active member and speaker of the American Laser Study Club, and a founding member of the International Consortium of Oral Ankylofrenula Professionals (ICAP), in which she currently serves on the Board of Directors. She evaluates her patients for signs and symptoms of tethered oral tissues and sleep disordered breathing and provides laser lip, buccal, and tongue tie revisions from birth through adulthood using the Light Scalpel CO₂ laser.



Christy ChanKing's College Hospital, United Kingdom

Obstructive sleep apnoea: The general dentist's role in identifying, referring, and supporting patients

Ostructive Sleep Apnoea (OSA) is a silent, underdiagnosed epidemic that affects millions of individuals worldwide, yet its severe health impacts, such as cardiovascular disease, metabolic disorders, and impaired quality of life, remain vastly overlooked. In the UK alone, around 666,000 individuals present with symptomatic sleep apnoea annually, but a staggering 82% go undiagnosed, as only 121,000 are referred for sleep testing. General Dental Practitioners (GDPs) are in a unique position to change this statistic by spotting the early warning signs of OSA during routine dental exams. Anatomical markers, such as retrognathia, a narrow palate, or compromised airway space, are often visible to GDPs, enabling them to intervene long before the condition progresses into more severe, life-threatening stages.

This presentation is a call to action for GDPs worldwide to become front-line defenders in the battle against OSA. Attendees will be guided through the critical aetiology and clinical features of OSA, emphasizing how GDPs can recognize and identify patients at risk. Practical insights will be shared on how GDPs can use their unique position to effectively screen for OSA during routine check-ups, empowering them to initiate life-saving referrals. By including crucial details in their referrals, GDPs can ensure timely diagnostics and reduce the burden of untreated OSA, improving patient outcomes and preventing serious health complications.

Through a dynamic exploration of the referral pathway, we will provide a detailed flowchart of the current triage process at King's College Hospital, highlighting how GDPs can contribute to a more efficient diagnostic journey for OSA patients. The session will explore the full spectrum of treatment options post-referral, from non-surgical interventions like oral appliance therapy and CPAP, to lifestyle modifications and surgical procedures for more complex cases.

By advocating for the proactive involvement of GDPs in the OSA care continuum, this session demonstrates how dental professionals can not only enhance their practice but also contribute to a much-needed shift in public health. Attendees will leave equipped with practical knowledge and a renewed passion to take action, ensuring that OSA no longer remains an overlooked issue but instead becomes a priority in dental and overall healthcare. This presentation aims to inspire GDPs worldwide to play a pivotal role in improving patient care and transforming lives by addressing the often-hidden epidemic of obstructive sleep apnoea.

Biography

Dr. Christy Chan graduated with a Bachelor of Dental Surgery from Queen's University Belfast. She then completed her dental core training in Paediatric Dentistry at UCL Eastman Dental Hospital, followed by a senior house officer role in Oral and Maxillofacial Surgery at Queen Mary Hospital and King's College Hospital. Dr. Chan is currently expanding her expertise through postgraduate training in Advanced Aesthetic Dentistry at UCL Eastman Dental Hospital.



Cindy Dodo

General Dental Science Department, Prosthodontics & Biomaterials, Marquette University School of Dentistry, MKE-WI-USA

Advanced aesthetic planning in dental implants

Digital planning enhances aesthetic expectations and provides better prognostics for implant placement and restoration. By determining the smile through digital planning, clinical outcomes for aesthetic restorations can be significantly improved. This presentation aims to share the tools and techniques for aesthetic cases, utilizing a combination of digital software for planning aesthetic restorations.

Biography

Dr. Cindy Dodo is the Director of the Prosthodontics & Biomaterials Predoctoral Program and a Clinical Assistant Professor at Marquette University, WI, USA. She also serves as a Scientific Advisor for dental implant companies and digital dentistry software developers. Dr. Dodo earned her dental degree from the University of Campinas, Brazil, where she also completed her PhD in Clinical Dentistry with a focus on Prosthodontics. She then pursued a fellowship at the University of Rochester, USA. Dr. Dodo is a certified specialist in dental implants by the Brazilian Federal Council of Dentistry and has conducted postdoctoral research on dental implant prosthetic components.



Daniil Kaplan

Department of Orthodontics, Russian University of Medicine, Moscow, Russia

Development and implementation of digital technologies for assessing the state of the dental system and assessing its deviations from normal parameters

.V. Talalaeva (2012) assessed facial aesthetics in individuals with physiological occlusion of the dentition using a 3D scanner system. It should be noted that the index relationships of the soft tissue parameters of the face presented by the author according to the data of photometry, teleroentgenography and three-dimensional scanning are very relevant for their inclusion in our scientific study. A. Rossetti, M.D. Menezes, R. Rosati, V.F. Ferrariom, C. Sforza (2012) used Three-Dimensional (3D) stereophotogrammetry, which turned out to be the "gold standard" in the field of facial anthropometry. The authors proposed the concept of a three-dimensional analysis of the structure of the dentition by developing a three-dimensional complex model of the head with correctly located dentitions. For the first time, scientists present 3D standards, that is, norms that can be used to diagnose the state of the dentoalveolar system.

It is very important to develop computer versions that would allow evaluating facial aesthetics both in normal and with anomalies of occlusion of the dentition. A significant number of digital technologies related to the diagnosis and treatment of dentoalveolar anomalies are presented in domestic and foreign literature. Basically, these are digital diagnostic methods related to the interpretation and analysis of teleroentgenograms, anthropometric data and functional studies. A method has been developed for assessing the harmony of the development of the dentition (Hasund A., Segner D., 1991), the harmony of the occlusion of the dentition (Rybakova M.G.,2012). However, none of these methods is able to fully assess the dental status of an orthodontic patient, determine the direction of the occlusal line of the upper and lower dentition and predict the direction that may be the result of orthodontic treatment. There is no way to assess the state of facial aesthetics, which would allow more accurate clinical diagnosis and treatment plan. The use of diagnostic and treatment methods in a three-dimensional format will allow you to visualize and analyze the ongoing changes. And we developed a computer version of facial aesthetics assessment.

Biography

Dr. Kaplan studied at the Moscow State Medical and Dental University named by A.I. Evdokimov, which is currently called the Russian University of Medicine, and graduated from that university in 2020. After that he studied in residency in the specialty of orthodontics and was engaged in scientific activities. In 2022, he completed his residency and received a PhD in medical sciences. He remained to work at the university as an assistant in the department of orthodontics. Actively involved in teaching, research and clinical practice. In 2024 he wrote the book "A Practical Guide to the Specialty of Orthodontics", recommended by the Ministry of Education and Science of the Russian Federation.



Dr. Eduardo Rubio*, Dr. Mariano Mombru Universidad Católica Argentina

Counterclockwise rotation in sleep apnea patients

Ostructive sleep apnea is a silent and underdiagnosed illness. Oral and Maxillofacial Surgeons as well as Orthodontists have the possibility to discover young patients with skeletal patterns before the appearance of symptoms. They have the opportunity to treat them at a young age. We'll discuss the use of counterclockwise rotation, comparing it with other techniques.

Biography

Dr. Rubio graduated from Dentistry Faculty at University of Buenos Aires, Argentina. He obtained his PhD from the same University. He completed Oral and maxillofacial training at the French Hospital, Buenos Aires, Argentina. He holds a Master's degree in Health Business Administration. Nowadays he is Head of Postgraduate program on Oral and Maxillofacial Surgery of the Argentine Catholic University, and Head of Surgery III and IV in the undergraduate program in the same university. Dr. Rubio is devoted to Oral and Maxillofacial Surgery, with a specialization in Orthognathic Surgery.



Dr. Emmanuel Samson^{1*}, Dr. Pradnya Jadhav²

¹Department of Dentistry, Government Medical College & Hospital, Miraj, India ²Department of Public Health Dentistry, Government Dental College, Aurangabad, India

Changing trends in endodontic sealers and focus on its cytotoxicity

There has been a paradox shift from traditional oburation technique with less sealer to a bioceramic technique, where sealer is used to fill the entire prepared root canal space, while gutta-percha acts as a plugger or to help in rerootcanal treatment.

A diverse range of sealer are introduced in the market, right from Rickets sealer (1931) to modified Grossman's, non-staining zinc oxide eugenol sealer (1958), later 1920 Herman introduce calcium hydroxide material for pulp capping, intracranial medicament, its high ph. induces tissue formation and antimicrobial property. Epoxy resin currently widely used, a prototype of AH series was introduce by Schroeder in 1957, excellent physical property and sealing ability.

Where Hydrophilic Calcium Silicate Sealer (HCS), Iroot-SP, innovative ceramics was introduced in the market. The purpose of the hydrophilic, hydroscopic bioceramic sealer was not only to prevent apical percolation but also to form hydroxyapatite crystals, blocking dentinal tubules, due to hydrophilic nature of the sealer and hydrophilic dentinal tubules thus helps in forming a tag filling the gaps, along with this it also has properties like biocompatibility, bioactive inducing osteogenesis and angiogenic response.

As the sealer comes in director contact with the periapical tissue it should not cause inflammation leading to tissue response, degradation or delayed wound healing, thus by current concepts sealers should be non-cytotoxic, non-mutagenic, and should not provoke immune response.

The reviews article focuses on the changing trends, cytotoxicity studies of bioactive sealers, properties, its methods and conclusion.

Keywords: Bioactive Sealers, Cytotoxicity, Biocompatibility, HCS.

Biography

Dr. Emmanuel Samson graduated (BDS) from Vasantdada Patil Dental College & Hospital Sangli, India. Postgraduate (MDS) in Conservative dentistry and endodontic from Kle's Institute of dental sciences, Belgaum India in 2003. Worked as an specialist/Consultant in Inlaks hospital, Manipal Cure and Care.as an academician presently working as professor and head, department of dentistry Government medical College and Hospital Miraj, India.



Enass ShamsyUniversity of Lincoln, United Kingdom

Bridging the gap: Enhancing collaboration between dentists and dental therapists/hygienists for optimal patient outcomes

The evolving landscape of oral healthcare emphasizes the need for a collaborative, teambased approach to meet the increasing demands of diverse patient populations. My presentation explores the critical role of interprofessional collaboration between dentists and dental therapists/hygienists in achieving superior patient outcomes.

Traditionally, dental teams have operated within clearly defined professional boundaries, but this model often limits the potential for synergistic care. Dentists, with their diagnostic and procedural expertise, and dental therapists/hygienists, with their preventive and maintenance-focused skillsets, bring complementary strengths to the table. However, gaps in communication, role understanding, and trust can hinder the effectiveness of this partnership.

This talk will delve into the current challenges that prevent seamless collaboration and propose evidence-based strategies to address them. Drawing on research, case studies, and successful international models, I will highlight how fostering mutual respect, clear role delineation, and shared decision-making can create a cohesive dental team. Specific focus will be given to:

- Enhancing Communication: Strategies to build open channels of communication that encourage input from all team members, ensuring that the patient remains the central focus.
- Role Awareness and Education: Implementing interprofessional education programs to clarify each team member's contributions and break down professional silos.
- Shared Goals in Patient Care: Establishing common objectives, such as reducing oral health disparities, improving access to care, and achieving measurable outcomes in patient satisfaction and oral health.
- **Practical Solutions:** Examples of workflow optimization, delegation of tasks, and the use of technology to support integrated care delivery.

The presentation will also discuss the benefits of this approach for patients, including enhanced access to preventive care, timely interventions, and improved oral health literacy. Additionally, it will underline the broader impacts on public health and the dental profession, such as increased efficiency, reduced workload stress, and greater job satisfaction.

In conclusion, I will emphasize that bridging the gap between dentists and dental therapists/ hygienists is not merely a theoretical ideal but a practical necessity for advancing patient care in the 21st century. By embracing collaboration, we can build a more resilient and effective oral healthcare system, ensuring that every patient receives the best possible care.

Biography

Dr. Enass Shamsy is a dedicated dental professional and educator with over a decade of experience in dentistry and dental education. Holding a Master's in Endodontics and Conservative Dentistry and a Master's in Medical Education, she has a strong background in teaching and mentoring dental teams. Dr. Shamsy has a keen interest in promoting interprofessional collaboration between dentists and dental therapists/hygienists to enhance patient care. Her research focuses on innovative approaches to improving oral health outcomes through teamwork and education. With a passion for advancing the dental profession, Dr. Shamsy actively contributes to public health initiatives and professional development.



Dr. Gulnar Dara Sethna, Associate Professor (Academic)

Dept of Periodontology, Government Dental College & Hospital, Mumbai, India

Beyond the dental implant-peri-implantitis unveiled

eri-implantitis is a growing concern in implant dentistry, characterized by inflammation and bone loss around dental implants. Often silent in its early stages, it can lead to implant failure if not detected and managed promptly. This presentation will uncover the causes, risk factors, and diagnostic challenges of peri-implantitis, while exploring current treatment strategies. By understanding its pathophysiology and preventive measures, clinicians can improve implant longevity and patient outcomes.

Biography

Dr. Gulnar Sethna is an alumnus of the prestigious Government Dental College Mumbai, which she joined in 1989. Following her BDS she went on to do her MDS in Periodontology from KCDS, Bangalore and trained in Implantology from SDM, Dharwad. With a vast experience of more than 25 years of dental practice behind her, she has had a decade long stint in the Indian Army & has served in various corners of the country. Currently appointed as faculty in her alma mater, GDC, Mumbai; Dr. Gulnar has several publications in national & international journals. Her areas of special interest include periodontal plastic surgery, aesthetic dentistry & dental implants.



Dr. Isha RastogiDr. KNS MIMS, Barabanki, UP, India

Oral clefts-dental development anomaly. A review

nomalies are any disturbances or abnormalities which occur due to any reason in the human body. Some are mild while others have serious consequences. Various anomalies prevail in head and neck region. Some are specifically important for dental branch and medical fields. In dental, an inrerdisciplinary approach is used to treat it. Cleft lip and palate are dental development anomalies. They are common and they should be studied by the dental and medical clinicians. These are of significance for society and the doctors. Oral clefts are these dental development anomalies which need special attention. Cleft lip and palate are common and these should be studied by the clinicians. Cleft lip is the failure of fusion of the frontonasal and maxillary processes, resulting in a cleft of varying extent through the lip, alveolus, and nasal floor (an incomplete cleft does not extend through the nasal floor, while a complete cleft implies lack of connection between the alar base and the medial labial element. Aim of this is to study about cleft lip and palate and know about their details in patients so as to treat them well. It is known that clefts occur as dental development anomalies. These need to be diagnosed, examined, treated successfully. When clinicians take this issue as serious, only then the patients will be benefitted. This anomaly is well known to all. Awareness and knowledge both in patients and clinicians is needed. This is a team approach. Also it requires skills on part of the clinician. Investigations, if done timely, can do miracles for this problem.

Biography

Dr. Isha Rastogi BDS, MDS (Prosthodontics), Completed her education Career Dental College and Hospital, Lucknow, Uttar Pradesh, India. She did schooling from La Martiniere Girls' College, Lucknow. An avid reader, sports cum music lover and enthusiastic writer. She has keen intrest doing original innovative work in her profession. She attend conferences and do try to present posters or oral presentation. She has some publication and articles as she believe that sharing our knowledge is learning. Presently she is working as faculty in a medical college in India-Dr KNS MIMS Barabanki Uttar Pradesh. Her view is to upgrade academics and also give best dental services to needy dental public.



Jamal Hassan Assaf^{1*}, Henrique Hollweg²

- ¹Department of Stomatology, School of Dentistry, Federal University of Santa Maria, Brazil
- ²Department of Restorative Dentistry, School of Dentistry, Federal University of Santa Maria, Brazil

Long-term evaluation of soft tissue stability in class 1 defects treated with GBR technique

Resorption of the alveolar walls, particularly the buccal walls, has been observed after tooth extraction. Since the buccal bone wall is composed of bundle bone, resorption is greater in this area. In contrast, less resorption is found in the lingual walls, which are thicker and composed of lamellar bone.

Since the immediate implant itself does not have the ability to prevent alveolar dimensions loss, treatment modalities focusing on preserving the alveolar ridge after immediate implant placement in the extraction socket have been studied. Recently, Araújo et al (2005) conducted a study using Bio-Oss collagen with immediate implants in the gap (Class 1 defects, characterized by a gap between the implant surface and intact bone walls) in dogs. It was demonstrated that the placement of Bio-Oss® Collagen modified the process of hard tissue healing, provided additional amounts of hard tissue at the entrance of the previous socket and improved the level of marginal bone-to-implant contact. Maintaining a well-preserved buccal bony wall can result in proper soft tissue contours around implants and consequently enhance the esthetic outcome of dental implant restoration.

However, specific studies for class 1 defects (with xenografts in the GAP) assessing the long-term soft tissue dimensional stability following immediate implant placement are scarce. In this presentation we will present long-term results in the gingival tissues of the sites that received immediate implants and bone in the gap in the anterior region of the maxilla. The results of the stability of the bone tissue in these sites have already been demonstrated at the 2024 meeting in Singapore and in this next meeting we will demonstrate the impact of maintaining the buccal bone wall on the stability of the gingival margins in this same cases. We will present several clinical cases with follow-up of more than 10 years.

Biography

Dr. Jamal Hassan Assaf has been an Associate Professor at Federal University of Santa Maria since 1994. He is a Specialist in Periodontics and has a Master's degree, Doctorate and Post-doctorate in Implantology. He has several articles published and cited in the area of implants in aesthetics regions.



Dr. John Watt, Specialist Registrar in Orthodontics
NHS Royal Surrey Hospital & Kings College London, England, United Kingdom

The consequences of the impacted maxillary incisor and their management in orthodontics

Maxillary central incisors are rated the third most commonly impacted tooth after third permanent molars and maxillary canines. Although relatively rare, impacted maxillary centrals present at a young age and can be difficult to treat and often require a multidisciplinary approach from orthodontists and oral surgeons alike. Treatment often requires surgical exposure under general anesthesia followed by fixed orthodontic treatment. Due to the complexity of this treatment, inappropriate case management including late referral can have a devastating impact on the patient which will result to complex restorative work being required for their entire life.

Aside from the background of this complex condition, this presentation will discuss in detail the aetiology of impacted maxillary incisors, different methods of diagnosis for general dentists and specialist orthodontists. The benefits and consequences and different treatment options will also be discussed including risks of inappropriate action from clinicians. This presentation will also discuss current guidelines set by the Royal College of Surgeons in England on suggested protocol in management of unerupted maxillary incisors and how these guidelines could improve outcomes for patients.

The presentation will also touch on a study performed at the Royal Surrey Hospital looking at referral patterns to the hospital from both general dentists and specialist orthodontists and the surgical complications which patients endured, including repeating surgery. Results will be presented in this presentation with suggestions on how specialist orthodontists and general dentists could improve their clinician awareness.

Biography

John qualified as a dental surgeon in England at The University of Central Lancashire (UCLAN) in 2020. After graduating he continued with his education and training which has recently resulted to being awarded membership to the Royal College of Surgeons in England. John has worked for several years as a senior house office in Oral & Maxillofacial Surgery and Oral Medicine gaining a wide range of experience in difficult hospital based dentistry. John is now training to be a specialist orthodontist who has a keen interest in interdisciplinary links between specialties of dentistry; particularly oral surgery and orthodontics.



Dr. Kanika Gupta Verma

Professor, Department of Pediatric and Preventive Dentistry, Teerthankar Mahaveer University, Moradabad, Uttar Pradesh, India

Influence of growth on failure of inferior alveolar nerve block

n children, repeated injection of the local anaesthetic solution due to failure of IANB can be a tedious task as it may result in a negative behaviour of the child and there exists the risk of administering the solution above the recommended safe dose. This is due to varied positions of mandibular canal that carry inferior alveolar nerve. The internal surface of the ramus is punctured by the mandibular foramen, situated halfway between the anterior and posterior borders of the ramus at the level of the occlusal surfaces of the lower teeth, and through which the inferior alveolar nerve and vessels enter the mandibular canal, ultimately terminating at the mental foramen. The mandibular canal is present as a single conduit in most individuals and is classified into three types according to Carter and Keen, 1971. Type I: inferior alveolar nerve is a single large structure lying in a bony canal; Type II: the nerve is situated substantially lower down the mandible; and Type III: the inferior alveolar nerve separates posteriorly into two large branches, corresponding to bifid mandibular canal. Such anatomical variations, along with operator technique, are a cause of failed Inferior Alveolar Nerve Block (IANB) anaesthesia. By following the landmarks, the anaesthetic solution is delivered as close as possible to the mandibular foramen. Literature lacks the data about varying position of mandibular foramen from childhood till adolescence. Thus keeping this in mind, this review was conducted to assess the changing positions of mandibular foramen in relation to child's growth and development from childhood to adolescence using radiographical techniques.

Biography

Dr. Kanika Gupta Verma received her Bachelor's in Dentistry from Govt Dental College & Hospital, Amritsar, Punjab in 2005; and Masters in Paediatric & Preventive Dentistry from Guru Nanak Dev Dental College, Sunam, Punjab in 2009. She is fellow in Scientific writing and Clinical trials. She has been working as an active academician since 13 years, with a keen interest in aesthetic and surgical management of children and adolescents. She is teaching both graduates and post graduates in the field of child oral health care. She is presently working as Professor in Deptt of Paediatric & Preventive Dentistry, Teerthankar Mahaveer Dental College and Research Centre, Moradabad. She is also a life member of Indian Society of Paediatric & Preventive Dentistry; and Indian Dental Association. She has around 68 national and international publications on her name. She is author and contributor to various books. She has delivered various lectures in National and International Conferences. She is reviewer and editorial board member of various national and international journals.



Kotryna Kozlovskaja*, Grėtė Kazlauskaitė, Arūnas Vasiliauskas

Department of Orthodontics, Lithuanian University of Health Science, Kaunas, Lithuania

Comparative effectiveness of probiotics versus fluoride in preventing dental caries in patients undergoing orthodontic treatment: A systematic review

Ain preventing dental caries for patients undergoing orthodontic treatment. A literature analysis was conducted using PRISMA guidelines. This search was performed up to September 6th, 2024, using the following terms: "probiotics", "fluoride", "dental caries", "orthodontic treatment", "caries prevention" in online databases PubMed, Google Scholar, ScienceDirect, Cochrane Library. A focus question based on PICO was formed: Are probiotics more effective than fluoride in preventing dental caries in patients undergoing orthodontic fixed appliance treatment? Inclusion criteria: randomized controlled trials, in-vivo studies, full-text research articles in the English language, research articles published less than 5 years ago.

The initial search yielded 2591 results. Studies that specifically investigated the association between fluoride and probiotics in the context of caries prevention for patients undergoing orthodontic treatment were selected for further analysis. After the selection criteria were applied, 5 studies were included in this review. All of the studies were randomized controlled trials, in-vivo studies. The follow-up periods were as follows: 14 days, 30 days, 6 months. A total of 303 patients participated in the conducted studies. Studies were executed using fluoride or probiotic mouthwash, dentifrice containing probiotic or fluoride, probiotic curd. Plaque samples were collected from study participants to compare the effectiveness of fluoride and probiotics by measuring S.mutans counts, as well as evaluating White Spot Lesions (WSLs). The results showed that Dadgar S. et al. (2021) and Nisha D. S. N. et al. (2023) found no significant difference between fluoride and probiotics in reducing Streptococcus mutans counts, suggesting equivalent antimicrobial effects. In another study by Mueez Bashir S. et al. (2019), a 44.5% decrease in Streptococcus mutans colonies around brackets was observed 30 days after using fluoride toothpaste, whereas the use of probiotic curd led to a mere 0.86% reduction, highlighting the superior efficacy of fluoride toothpaste (P<0.01). However, two studies demonstrated that probiotics were more efficient than fluoride at reducing bacterial levels (Goyal N. et al., 2019) and preventing white spot lesions (Tiwari A. and Jain R. K.,

2023). In fluoride mouthwash group, there was an increase (p=0.129) in P.gingivalis count at two different intervals T1 and T2, while in probiotic mouthwash group, there was a significant decrease in P.gingivalis count at 1% significance level (P<0.000). In another study, Tiwari A. and Jain R. K. (2023) used the conical tip of the DD-Pen to record the occurrence and severity of white spot lesions on the enamel of the tooth nearest to the bracket. Following a 6-month period, the incidence of WSLs was notably higher in the fluoride dentifrice group (46.37%) than in the probiotic dentifrice group (20.37%), indicating that the probiotic-containing dentifrice was associated with the lowest incidence of WSLs.

Both probiotics and fluoride effectively reduce S.mutans, but only probiotics can decrease P.gingivalis. When considering the formation of white spot lesions, probiotics outperform fluoride, making them a preferable choice for preventing dental caries in patients undergoing orthodontic treatment.

Biography

Kotryna Kozlovskaja is a fifth-year dental student at the Lithuanian University of Health Sciences (LSMU), with a strong focus on orthodontics. Kotryna is the founder and acting chairperson of the Orthodontic Club, which is part of the LSMU Student Scientific Society, dedicated to deepening orthodontic knowledge beyond the standard curriculum. Since 2022, Kotryna has been working as a dental assistant at Clinic DPC.



Laura Bettencour BSDH, RDH; Danielle Avila BSDH, RDH

L'Diamante Dental Coaching, Dracut, Ma, USA



Bridging the gap between professional development and patient care

This transformative course provides the tools to recognize and address fears head-on, enabling individuals to adeptly navigate challenging scenarios. Participants learn effective strategies for managing appointments and engaging in tough discussions with patients, bolstering their confidence and purpose in the healthcare field. By integrating state-of-the-art technologies, innovative products, and patient-centric protocols, attendees gain valuable insights and skills. Emphasizing empathy and compassion, the course emphasizes overcoming fears, facilitating improved patient care and personal development. Through this holistic approach, healthcare professionals enhance their capacity to serve with excellence, fostering both personal and professional growth.

Objectives:

- 1. Recognize and identify personal fears hindering professional growth and patient care.
- 2. Acquire skills to confidently manage appointments and navigate challenging conversations with patients.
- 3. Gain proficiency in implementing breakthrough products and adhering to patient protocols.
- 4. Cultivate the confidence and essential networking skills necessary for career advancement.
- 5. Achieve personal and professional growth by overcoming fears and embracing a positive mindset.

Biography

Danielle Avila BSDH, RDH and Laura Bettencourt, BSDH, RDH, possess over 15 years of clinical experience in the New England Area. They are the co-founders of L'Diamante Dental Coaching. Their expertise lies in fostering human connections, building relationships, advancing careers, and leading teams. As mindset hygiene career coaches they take great joy in guiding and empowering their clients to attain the confidence and clarity they desire. Danielle and Laura are deeply committed to education, mentorship, and promoting a positive attitude in all aspects of life.



Dr. Lujain Alsahman

College of Dentistry, King Saud University/PhD student, Riyadh, Saudi Arabia

Dental consideration in patients under bisphosphonate and radiotherapy: A systematic review

Background: Medication-related osteonecrosis of the jaw is defined as the necrosis of jawbone cells in patients who are on drugs known to increase the risk of the disease. The condition may lead to several complications in oral cavity. Osteoradionecrosis is a serious complication of radiotherapy for head and neck cancer. Radioactive osteonecrosis most commonly occurs in the mouth during treatment of head and neck cancer and can appear up to 5 years after radiation. The aim of current systematic review was highlighted on the dental consideration after and during radiotherapy and treatment of bisphosphonate.

Methodology: The present systematic review conducted to relevant recent articles that detected and identified through the journals databases (PUBMED, EMBASE, and MEDLINE) between the years 01 January 2015 to 01 May 2022. A search was achieved by using the specific keywords terms Dental care; Dental management; Bisphosphonate-Related Osteonecrosis of the Jaw (BRONJ); Osteoradionecrosis; Bisphosphonate; and Radiotherapy.

Results: The current systematic review conducted to 18 articles published after 2015s, most articles were highlighted on head and neck cancer with low sample size, and osteonecrosis condition during Bisphosphate therapy. The results showed significant Osteoradionecrosis effect of radiotherapy on jawbone characterized by non-healing socket after extraction, loosening of teeth, exposed oral cavity bone, poor healing and infection of soft tissue, numbness, or the feeling of heaviness in the jaw and exudate discharge. As well as the results showed negative osteonecrosis effect of BP therapy on the jawbone during therapy characterized by change of tooth structure.

Conclusion: HNC patients should have comprehensive dental examination before undergoing to radiotherapy, as well as clearance before start bisphosphates, also dentist should be highly educated and skilled in managing oral disease and minimize the high risk of complications.

Biography

Dr. Lujain studied Dentistry at the King Khalid University, Saudi Arabia, and graduated with a bachelor's degree with excellence in 2020. Qualified as an employee in the ministry of health. She then joined the Doctor of Science in Dentistry (DScD) in Oral medicine & diagnostic science at King Saud University, Riyadh. She received her The Diploma of Primary Care Dentistry (Dip PCD RCSI) degree in 2021 at the royal college of surgeons in Ireland. She has published more than 7 research articles in (E) journals.



Marcus Cowan DMD, FICOI, AFAAID DMD, United States

Digital implantology: Using digital workflows for improved & predictable implant cases

n 2025, technology has become ingrained in the practice of dentistry. Digital dentistry is in some way incorporated into almost every practice, whether it is an intraoral scanner, a CBCT, digital x-rays, AI diagnostic x-ray technology, the list goes on & on. With regards to implantology, more & more implants are being placed every year. Specialists are still placing an increasing number of implants, but the number of general dentists like myself placing implants is increasing rapidly every year. Being able to utilize the available technology & digital workflows can help all practitioners, specialist or GP alike, to achieve ideal results with reduced surgical times & increased predictability. This lecture will demonstrate prosthetically driven planning that can systematically lead to predictable results, from the extraction of a tooth up to the final restoration. This includes all aspects of the case including grafting & augmentation needs. Practitioners will know before they even place the implant if the restoration will be screw-retained or cement retained, & they will be able to plan accordingly for either. Different techniques will be discussed that can all lead to results that would be difficult to achieve using only freehand placement & stock components. Technology does not & should not replace appropriate training & knowledge of implantology, but once you have that foundation it is a tool that can help you immensely. The technology available when used accordingly helps make it easier to achieve world class results, & most of the work can be done before the patient is in the chair.

Biography

Marcus Cowan is a general dentist born in Lithonia, GA. He attended dental school at the Dental College of GA (formerly known as the Medical College of GA) in Augusta, GA. After dental school, Dr. Cowan completed a 2 year GPR at the same institution. The GPR program taught comprehensive dentistry, with an emphasis on surgical, implant, & sedation dentistry. Dr. Cowan is a Fellow in the International Congress of Oral Implantologists & an Associate Fellow in the American Academy of Implant Dentistry. He currently practices in Hudson, MA.



Melissa D. Porter^{1*} D.D.S., M.H.S.; Micheal Curry² B.S., M.H.S.; Jada Pierre² B.S., M.H.S; Kristin Smith² B.S.; Lark Taylor² B.S., M.H.S.; Dwight Martin² B.S.; Mirissa Price¹ D.M.D.; Zaid H. Khoury³ D.D.S., Ph.D

¹Department of Pediatric Dentistry, Meharry Medical College, School of Dentistry, Nashville, TN, USA

²Meharry Medical College, School of Dentistry, Nashville, TN, USA

³Oral Diagnostic Sciences & Research, Meharry Medical College School of Dentistry, Nashville, TN, USA

Unusual presentation of a rare disease in a patient with special healthcare needs: Scurvy

Objective: Vitamin C (ascorbic acid), an essential nutrient for humans and other primates, is crucial in collagen synthesis, immune function, and antioxidant defence. Severely insufficient levels of vitamin C can disrupt these processes, resulting in the nutritional deficiency syndrome scurvy. Scurvy impacts multiple organ systems and is characterized by compromised connective tissue synthesis.

Experimental Methods: A recent scurvy case report with literature review. Clinical images were obtained as part of the standard of care for the patient and retrospectively collected along with deidentified case-related material.

Results: 4-year-old female patient with autism presented with diffuse linear and granular ulcerative lesions limited to the maxillary alveolus and palate. A thorough work-up and an incisional biopsy were conducted. Histopathological examination of the maxillary mucosal lesions was consistent with granulomatous inflammation, which mandated ruling out a list of granulomatous conditions that may present in the oral cavity, such as Crohn disease. This further delayed reaching a definitive diagnosis until blood analysis revealed vitamin C deficiency (value<5, with a normal range 23-114 mcmol/L), suggestive of an unusual oral presentation of scurvy. The patient received vitamin C supplementation (500mg/15mL liquid by mouth daily) and responded favorability with blood analysis demonstrating levels within a normal range 11-weeks after commencing supplementation. At 18-weeks post-supplementation, oral lesions revealed resolution of the oral lesions.

Conclusion: In the United States, scurvy is considered a rare diagnosis and is typically only seen in patients with underlying conditions and restrictive diets, such as inner-city infants. Presentation may consist of oral manifestations such as gingival swelling, bleeding, petechiae, and systemic symptoms like fatigue, irritability, skin discoloration, impaired wound healing and joint pain. However, the presence of granulomatous inflammation on biopsy and involvement limited to the maxillary alveolus presentation are atypical for scurvy, and when encountered, may delay the diagnosis. The patient responding favorably to vitamin C supplementation, further confirming the diagnosis. We theorize that the granulomatous inflammation encounter on biopsy could be attributed to a sarcoid-like response secondary to vitamin C deficiencymediated immune dysfunction. The maxilla is certainly more porous with more marrow and vascularity possibly explaining limited maxillary involvement. Furthermore, neurological and developmental disorders pose additional challenges related to patient-management. In pediatric populations, scurvy can significantly impact on the quality of life and, if untreated, lead to severe complications affecting life expectancy. Understanding the relationship between vitamin C deficiency, its clinical manifestations and the need for interdisciplinary healthcare collaboration is crucial for accurate diagnosis and effective management.

Biography

Melissa D. Porter Graduated from Alabama A&M University in 2010, Dr. Porter continued her training at Meharry Medical College where she earned a Master of Science and Doctor of Dental Surgery degrees and completed a General Practice Residency. After residency training, Dr. Porter practiced for more than six years serving underrepresented populations. Currently, she is a senior resident at Meharry's Pediatric Dentistry program. Dr. Porter is adamant about enhancing preventive dental education to reduce the prevalence of oral diseases among pediatric populations. She enjoys spending quality time with her son, Jayden, dogs, Zero and Skor, volunteering, reading, and caring for her plants.



Monika OśkoBarcelona Orthodontic World Institute, Barcelona, Spain

The MFS philosophy: A causal approach to craniofacial growth and development through myofunctional stimulation

This presentation explores the MFS (Myofunctional Stimulation) philosophy as a causal and interdisciplinary approach to craniofacial growth and development. It begins with an introduction to the historical background and global adoption of the MFS approach, emphasizing its holistic integration with orthodontics and myofunctional therapy. The presentation delves into understanding craniofacial growth through myofunctional therapy by addressing causes and mechanisms of orofacial dysfunctions, highlighting the critical importance of oral functions such as breathing, swallowing, and mastication.

A key focus is on the interdisciplinary approach, which fosters collaboration among orthodontists, speech therapists, and physiotherapists. Clinical cases will illustrate the effectiveness of such interdisciplinary treatment strategies. The role of myofunctional stimulators is also discussed, showcasing their clinical applications, and benefits in achieving optimal treatment outcomes.

Innovative approaches to addressing tongue mobility issues using myofascial release techniques are presented, supported by insights from the latest research in topographic anatomy of the oral floor and lingual frenulum. The presentation concludes with real-world clinical cases demonstrating improvements in function and aesthetics, strategies to prevent relapse, and an exploration of the future directions in myofunctional orthodontics, with a focus on overcoming challenges in modern therapy and shaping global orthodontic practices.

Biography

Monika Ośko is a dentist and MFS Ambassador, currently pursuing doctoral studies at the Faculty of Odontostomatology, University of Barcelona. She is the President of the Polish Society of Myofunctional Therapy and holds a Master Universitario di Secondo Livello in Ortognatodonzia Clinica Avanzata. Monika is an Orthodontic Senior Instructor and Diplomat of the International Board of Orthodontics. She has lectured extensively, including at the Barcelona Orthodontic World Institute, and co-authored therapeutic children's books like "Zgryzek i przyjaciele" and "Uwolnić Frenulo." In 2022, she founded the Polish Society of Myofunctional Therapy, promoting advancements in functional orthodontics and pediatric craniofacial development.



Dr. Monika Sunil JadhavGoregaon Dental Centre, Mumbai, Maharashtra, India

Patient-centered care in maxillofacial prosthodontics

atient-centered care in maxillofacial prosthodontics is a crucial approach that tailors treatment to individual needs, prioritizing both the aesthetic and functional outcomes for patients who have experienced facial disfigurement due to congenital conditions, trauma, or disease. This approach ensures that prosthetic designs are personalized, considering the patient's unique anatomy, psychological well-being, and specific functional requirements, such as speech, mastication, and breathing. Recent advancements in digital technologies, such as 3D scanning, CAD/CAM systems, and digital impressions, have revolutionized the ability to create highly customized prostheses that better match the patient's natural appearance and comfort needs. Moreover, these technologies facilitate faster production, improved precision, and more cost-effective solutions, enhancing patient satisfaction and clinical outcomes. Despite these advancements, challenges remain in achieving perfect aesthetics, improving long-term prosthesis durability, and addressing the psychosocial impact of facial prosthetics. As awareness of the importance of patient-centered care grows, the future of maxillofacial prosthodontics looks promising, with a stronger focus on integrating multidisciplinary teams, advanced biomaterials, and innovative techniques to offer more effective, life-changing solutions. The continued development of these technologies, along with a holistic approach to patient care, will likely redefine the standards of maxillofacial prosthetic rehabilitation globally, ensuring that every patient receives care that is as unique as their individual needs.

Biography

Dr. Monika Sunil Jadhav, is a dedicated professional in the field of Maxillofacial Prosthodontics. She completed her undergraduate studies in dentistry at MGM Dental College, Mumbai, and went on to pursue her postgraduate specialization in Maxillofacial Prosthodontics at MGV Dental College and Hospital. In addition to her formal education, she has gained recognition for her academic contributions, winning awards at both state and national paper presentation conferences. She also has a number of publications in her name. Her professional journey is driven by a deep passion for maxillofacial rehabilitation, with a particular focus on enhancing the lives of patients dealing with facial deformities, congenital conditions, or post-surgical defects. Through her work, she aims to give back to society, using her expertise to restore not only the functional and aesthetic aspects of her patients but also their confidence and emotional well-being and she firmly believes that patient-centered care is the cornerstone of successful treatment in maxillofacial prosthodontics, and she is committed to providing personalized, compassionate care to each patient she serves.

Dr. Najat A Alyafei

Manager, Oral Health Promotion & Prevention Department, PHCC, Doha, Qatar

Prevention meets policy: Transforming oral health through innovation & public health integration

Oral health plays a crucial role in overall well-being, yet preventable dental diseases remain a global public health challenge. This presentation explores how integrating innovative preventive strategies with public health policies can transform oral health outcomes. Drawing from Qatar's programs, such as the Asnani School Oral Health Program, the Senan Oral Health Program, & Ejlal Home Oral Health Services, the session highlights how these initiatives address specific population needs. It also discusses forward-looking proposals, including mandatory school-based oral health screenings & the integration of salivary diagnostics & HbA1c testing in dental settings. By aligning oral health with broader public health frameworks, such as noncommunicable disease management, the presentation emphasizes Qatar's role as a leader in oral health innovation. Comparative insights from global models in Brazil, the UK, & Australia further enrich the discussion, providing actionable strategies for scaling up successful programs. This presentation aims to inspire policymakers, practitioners, & researchers to adopt a unified approach to oral health transformation.

Biography

Dr. Najat Alyafei, Manager of the Oral Health Promotion & Prevention Department (OHPP) at Primary Health Care Corporation, Qatar, is the first Qatari to achieve a bachelor's and a PhD in dental hygiene and healthcare. She earned her degrees from King Saud University (KSA), Old Dominion University (USA), and Bangor University (UK). After working at Hamad Medical Corporation, she established the OHPP department in 2016, leading unique initiatives like the Asnani School Oral Health Program. With extensive expertise in preventive oral health, Dr. Alyafei has contributed to raising public awareness through numerous articles published in local newspapers and has published studies as well.



Dr. Naval GhuleGoregaon Dental Centre, Mumbai, Maharashtra, India

The fight against tobacco: Bridging oral health and public health. How India does it!

ndia faces a significant burden of oral diseases, with tobacco use being a major contributor. As an expert in tobacco de-addiction, dental public health, and oral cancer, I combine clinical expertise with public health initiatives to address this pressing issue.

This presentation will explore evidence-based strategies for tobacco cessation, emphasizing the psychosocial and behavioral interventions crucial for sustainable outcomes. I will also highlight my experience in conducting extensive oral health screenings, which serve as a vital tool for early detection of oral cancer and other tobacco-related conditions. These screenings provide invaluable data and foster opportunities for community-level education and intervention.

Through a public health lens, I will discuss the challenges of implementing cessation programs, particularly in underserved populations, and the role of awareness campaigns in reducing tobacco consumption. By drawing connections between tobacco use and oral cancer, I will stress the importance of integrated care approaches and prevention strategies.

Using real-world examples from my practice, I will showcase the transformative impact of combining tobacco cessation counseling, large-scale oral health screenings, and multidisciplinary collaboration. Attendees will leave with actionable insights into counseling techniques, policy advocacy, and effective screening protocols, empowering them to contribute to India's fight against tobacco addiction and its devastating impact on oral health.

This session offers a comprehensive roadmap to addressing the dual challenge of tobacco use and oral cancer through prevention, detection, and intervention.

Biography

Dr. Naval Ghule studied Dentistry at the BVDU University, India and graduated in 2016. He then opened one of the largest dental practice in Mumbai. Dr. Naval Ghule is a certified tobacco cessation counselor and quit smoking expert with vast expertise in dental public health and oral cancer in India. Passionate about preventive care, he has conducted extensive oral health screenings, focusing on underserved populations and raising awareness about the dangers of tobacco use. Dr. Ghule specializes in evidence-based tobacco de-addiction strategies and emphasizes early detection of oral diseases. With a commitment to improving public health, he combines clinical knowledge, community engagement, and policy advocacy to ki combat tobacco addiction and its impact on oral health. His work empowers individuals and communities toward healthier, smoke-free lives.



Pantelejmon Trpchevski^{1*}, Vladimir Emanuilov Panov²

¹Student, Faculty of Dental Medicine, Medical University of Varna, Bulgaria ²Department of Conservative Dentistry and Oral Pathology, Faculty of Dental Medicine, Medical University of Varna, Bulgaria

Endodontics in geriatrics patients

Introduction: Due to the longer life expectancy nowadays, quite often patients have untreated diseases that lead to endodontic treatment. Which represents a great challenge for every clinician. Modern endodontics offers methods and approaches for each treatment. Despite the changes in the pulp-dentin complex, endodontic treatment is a predictable and effective.

Objectives: Develop the best solutions and methods who leads to successful results with aim to treat each unique endodontic case by analyzing the specificities by presentation of various clinical cases in different patients.

Materials and methods: Analysis of our available literature and the individual endodontic approach to various clinical cases from practice, which are documented over a period of time

Results: Successful completion of endodontic treatments using different approaches and methods over time has provided a basis for further multidisciplinary treatment in elderly patients.

Conclusion: Successful endodontic treatment can be achieved despite the complex specifics of teeth in old age, which can cause unwanted complications if the correct approach is taken to each individual clinical case.

Keywords: Endodontic Treatment, Advanced Age, Difficulties, Geriatrics Patients.

Biography

Pantelejmon Trpchevski, dental student fifth year in Faculty of Dental Medicine, Medical University–Varna, Bulgaria. Head of technical support and member of the management board of ASDM (Association of Students-Dental Medicine-Varna). Member of Student Council of Medical University-Varna. Demonstrator of Anatomy and Cell Biology period: March-May 2022 year. Brand ambassador of Denco Medical®-China. Active participant and speaker in few congresses with endodontics session: Dent-X Congress 2024–Bucharest, Romania, 30th anniversary edition of the International Student Dental Congress-Dental Faculty Skopje 2024-Ohrid, Macedonia, ICDO 2024–Madrid, Spain. Passive participant: Sofia Dental Meeting 2022, 23–Sofia, Bulgaria, Shumen Dental Forum 2024, 25–Shumen, Bulgaria and other lectures and demonstrations in the field of endodontics.



R. Kavitha

Department of Pediatric dentistry, SRMKDC, Chennai, Tamilnadu, India

Sensory processing disorders – A great barrier in treating special children

Oral Defensiveness (OD) is considered a sub-component of regulatory disorders in which the child is hypersensitive to sensory stimuli including auditory, tactile, visual, and vestibular stimulation. Usually described as an excessive stress response, it is not inherently a neurological or developmental issue. The fear/defense pathway, which functions independently of consciousness and has been programmed by evolution to respond to danger in predictable ways, generates a system of defensive behaviors through the autonomic nervous system's nerves as well as hormonal and immunological responses. Treatment for the whole range of dysfunctions, which are mostly identified by occupational therapists, usually entails a long-term intervention program.

The early feeding process may be hampered by oral tactile hypersensitivity. The infant may reject uneven food, struggle to maintain a suck, or pull away from the breast. Stress in general and during dental treatment in particular may be experienced by the older child. Aversion to cement and imprint material textures and scents, discomfort lowering oneself backwards with the dental chair, or terrified unwillingness to let the dentist into the mouth cavity with anguish at actual touch within are a few examples. OD is a controversial disorder that lacks strict criteria for diagnosis and management. In addition, no dental protocols have been evaluated for effectiveness. The purposes of this paper are to acquaint dentists with the dysfunction, to increase awareness of its occurrence, and to suggest possible interventions for alleviating aversive responses to typical dental experiences when no other cause is apparent. Dentists should be aware of the signs and e signs and symptoms of a child who comes into their office with the label of OD from an occupational therapist and be able to communicate with the child and parents accordingly.

OD is a controversial disorder that lacks strict criteria for diagnosis and management. In addition, no dental protocols have been evaluated for effectiveness. The purposes of this paper are to acquaint dentists with the dysfunction, to increase awareness of its occurrence, and to suggest possible interventions for alleviating aversive responses to typical dental experiences.

Biography

Dr. R. Kavitha started her graduation at Government Dental College Chennai, and post graduation at Ragas Dental College, Chennai in 2005. Her keen interest on nanoparticles made her complete PhD at SRM University. With a teaching career of around 19 years, she has around 45 publications in Scopus and Pubmed indexed journals. Professor has given guest lectures in many National events. She received the Distinguished women of the year award in 2023. Having completed her certification course in Special Care Dentistry she is more interested in treating special children.



Prof (Dr). Ramesh Nagarajappa

Department of Public Health Dentistry, The Oxford Dental College, Bengaluru, India

Significance of understanding burnout among dental professionals

Burnout has been the focal point of examination in psychiatry for quite a while. Frequently portrayed as a process, condition, or disorder, it is too complex a phenomenon. There are varying philosophies, opinions, and different models behind this ailment. It is a phenomenon encompassing emotional exhaustion, depersonalization, and reduced personal accomplishment. Despite the plethora of proposed mechanisms, its diagnosis is challenging. Research in this area has prompted the development of various tools, the maslach burnout inventory being the most generally used one. Being a serious threat to the dental profession, burnout syndrome is considered a public health issue. This presentation focuses on the development of burnout, and evaluating the contributing factors in dentistry, with an emphasis on its diagnosis, management, and prevention.

Keywords: Burnout, Dentists, Public Health.

Biography

Prof (Dr). Ramesh Nagarajappa graduated from the prestigious Bapuji Dental College and Hospital, Davangere, India in 1999. He is currently working as a Professor and Head, in the Department of Public Health Dentistry affiliated to Siksha 'O' Anusandhan (Deemed to be University) at Bhubaneswar in India. He has a post-graduation teaching experience of over 22 years and guiding both PhD and MDS students. He has also authored 153 publications in various international and national reputed journals. Been a regular reviewer too in many journals. He has experience in delivering scientific presentations and chairing scientific sessions in various conferences.



Richa Gupta
Independent Medical Writer and Editor, Aurora, Illinois, United States

Embracing digitalization - Stay ahead in modern dentistry

Digital dentistry represents a revolutionary shift in the dental profession, enhancing patient treatment options significantly. This technology is not just a future trend; it is actively transforming practices today. The successful implementation of digital technology in dental offices relies on the collective knowledge of the dentist and their entire team. Recent advances in dental technology have introduced a variety of tools, including intraoral scanners, 3D imaging, CAD/CAM software, and 3D printing. These innovations enable dental professionals to digitally capture, analyze, design, and fabricate custom restorations such as custom crowns, bridges, and dentures.

The advantages of digital dentistry are manifold: increased accuracy, enhanced efficiency, and improved patient comfort throughout the diagnostic, treatment planning, and fabrication processes. New technology streamlines workflows across various dental specialties, including general, paediatric dentistry, implantology, and orthodontics by replacing traditional methods and techniques. Through leveraging these advanced technologies, dental professionals can enhance the quality of care, streamline operations, and ultimately redefine patient experiences in the dental field.

Biography

Dr. Richa Gupta holds a Bachelor's degree in Dental Surgery from MJP Rohilkhand University in Bareilly, India, and has furthered her education in Hospital Management at the National Institute of Health and Family Welfare in New Delhi, India. She is certified in scientific writing from Stanford University, USA, and has completed Editors Training and Support with IP Innovation Publications, India. With 12 years of experience in the field of dentistry, Dr. Gupta has established herself as a proficient medical writer, producing high-quality articles for diverse audiences in both national and international journals as well as leading dental magazines. She possesses a strong expertise in analyzing complex clinical literature and guidelines to create impactful research publications. To date, she has authored over 13 articles and contributed more than 40 blogs, articles, and chapters, actively enhancing dental practices and technological advancements through her writing endeavors.



Robert L. Karlinsey PhD

Custom Dental Formulations, LLC, United States

Antimicrobial performance of commercial antiplaque/antigingivitis formulations

Introduced at least as early as 1995, Plaque Growth and Regrowth Methods (PGRM) are sometimes used to assess the potential efficacy of antimicrobial oral care formulations. In fact, PGRM models are recognized as an evaluation tool by the US FDA for products comprising Cetylpyridinium Chloride (CPC) and Stannous Fluoride (SnF2). These models, which may vary in design, typically assess plaque regrowth or glycolysis responses, or even plaque biofilm formation, when microbial species are exposed to the putative treatment. We recently introduced a Glycolysis and Automated Plaque Regrowth (GAPR) model that demonstrates sensitivity to a range of putative antimicrobial agents (Karlinsey & Karlinsey. Dent. J. 2024, 12(5), 146). In addition to bespoke recipes that assess microbial regrowth or glycolysis, the GAPR method utilizes harvested human plaque, which contrasts with the typical monospace Minimal Inhibitory Concentration (MIC) and Kill-Time (KT) evaluations. Despite the use of MIC and KT in ingredient/formulation screening, sometimes these evaluations conflict with other similar assays or do not mirror clinical outcomes. Using the GAPR method was a possible screening tool to help bridge the lab-clinic divide, in this presentation we provide background and methodology, as well as share some results when we applied our model to various commercial dentifrice and mouthwash products, including those with antiplaque benefits that lack formally recognized antimicrobial agents such as CPC or SnF₂.

Biography

Dr. Robert L. Karlinsey is a scientist and formulator with almost 20 years' experience in dental research. He earned a BS in Physics (University of Scranton) and PhD in Chemical Physics (Indiana University), with postdoctoral work in physical chemistry (Indiana University). As a visiting assistant research professor at the Indiana University School of Dentistry, his research led to an impactful encounter with Dr. George Stookey, and shortly thereafter, the formation of Indiana Nanotech, LLC (now known as Custom Dental Formulations, LLC), of which he spearheaded all research and small-scale manufacturing efforts. Dr. Karlinsey is the inventor of Nanotech's functionalized tricalcium phosphate systems, which continue to help generate over \$100MM in global product sales for a major dental manufacturer. As Principal Investigator, his work has received significant funding through Federal (National Institutes of Health), State (Indiana and Texas), and industry grants and contracts. His research in patented calcium phosphate technologies continues to help generate over \$100MM in global product sales. Previously, Dr. Karlinsey has served as Chief Scientific Officer at Therametric Technologies, Inc, and adjunct professor of chemistry at the University of Indianapolis. Dr. Karlinsey addresses clients' needs in preventive and cosmetic dentistry, including fluoride- and fluoride-free remineralization, antiplaque/gum health, whitening systems, and more. He is actively involved in clinical and laboratory research designs and performance-backed, customized oral care formulation solutions. And, whenever possible, he favors natural, nature-derived, and/or sustainably sourced ingredients.



Dr. Rusul Yaseen

Cosmetic Dentist, Certified Smile Makeover, Invisalign Certified Provider, Certified Laser Specialist, Dubai, UAE

Anterior veneers preparation: A practical guide

This presentation delves into the intricacies of anterior veneer preparation, providing a comprehensive practical guide. The content covers the definition and purpose of veneers, pre-operative considerations, and detailed steps for veneer preparation, including depth cuts, labial reduction, incisal reduction, proximal reduction, and margin design. Key techniques such as creating the elbow for interproximal areas, opening interproximal contacts, and smoothening and polishing are explained with precision.

Biography

Dr. Rusul Yaseen is a Dubai-based cosmetic dentist with eight years of expertise in veneers, fillings, crowns, bridges, and laser treatments. She is certified in smile makeovers, laser treatments, nitrous oxide sedation, and advanced teeth whitening. Dr. Yaseen has earned multiple diplomas in restorative and aesthetic dentistry. Dedicated to continuing education and excellence, she also volunteers globally with SAMS Medical, assisting special needs children.



Sanaz Heidarkhan Tehrani

Assistant Professor, Department of Oral and Maxillofacial Radiology, Dental School, Islamic Azad University of Medical Sciences, Tehran, Iran

Radiographic evaluations of zygomatic implants

One of the problems for surgeons is the placement of dental implants in the proper position in patients with complete edentulism. Since severe bone resorpion can cause anatomical changes, it is very difficult to achieve a suitable osteotomy site that provides proper occlusion in the prosthetic phase. Extensive reconstructions using other bone grafts are both time-consuming and invasive. Therefore, the use of zygomatic implants can be a suitable alternative in these cases. Since the most common causes of zygomatic implant failure are sinusitis and lack of integration into the bone, accurate radiographic evaluation before implant surgery is very important and plays a critical role in the success rate of zygomatic implants. Although initial examinations begin with panoramic images, the degree of sinus pneumatization, thickness of the lateral sinus walls, increased thickness of the sinus mucosa, and patency of the ostium should be best evaluated with CBCT images.

Keywords: Implant, Zygomatic bone, Surgery

Biography

Sanaz Heidarkhan Tehrani graduated in General Dentistry and worked as a dentist for eight years before pursuing advanced education in Oral and Maxillofacial Radiology. Now as a dentomaxillofacial radiologist, she is an assistant professor and faculty member at Islamic Azad University of Medical Sciences. She has conducted several research studies and published multiple case reports. Her expertise has led to invitations as a speaker at the EXCIDA conference, the largest dental congress in Iran, for four consecutive years, as well as at continuing education courses organized by the Iran Medical Council.



Dr. Shveta Setia Thareja

Department of Prosthodontics, Crown & Bridge and Implantology, Faculty of Dental Sciences, SGT University (Gurgaon), India

Tips and tricks of ceramic veneers

The success and aesthetic outcome of indirect veneers hinge on the skills of a dental professional and efficient collaboration with the laboratory technicians. This symbiotic relationship is pivotal for achieving outstanding results. Aesthetic success begins with the mindful approach, ranging from minimally invasive to aggressive preparations, aligning with contemporary philosophy of less is more in dentistry.

Embracing a conservative strategy with minimal tooth reduction not only promotes adhesion but also enhances clinical longevity. Advances in ceramic materials, adhesive cements and preparation techniques provide clinicians with a diverse range of restorative options

This presentation aims to guide practitioners in adjunctive treatments, emphasizing clinically driven approaches, modern classification, and bonding protocols that ensures aesthetics, precision and longevity for optimal outcome.

Biography

Dr. Shveta, a distinguished Prosthodontist, graduated from Kurukshetra University, Haryana, India in 2013 and earned her postgraduate degree from SGT University in 2017. Renowned as a mentor for fixed prosthodontics at Vatech, India and the visionary owner of Artistree Dentals and Cosmetic Clinic, she seamlessly combines clinical mastery with unwavering passion. Beyond the dental chair, Dr. Shveta is a dynamic force in social impact, actively contributing to awareness platforms such as Times Now and Hindustan Times. An esteemed member of the Indian Dental Association and Indian Prosthodontic Society, her commitment to dentistry shines through her diverse contributions to clinical excellence, education, and advancing societal oral health awareness.



Steven J TraubAmerican Institute of Oral Biology, United States

Immediate post-extraction molar implant placement

This lecture includes a historical review of dental implant techniques and materials dating from 1982 to 2024, a 42 year experience. Special attention is paid to immediate maxillary and mandibular molar implants over an 11-year period of time from 2007 to 2018, citing over 800 consecutive cases in his office-based practice. In particular, the focus includes use of the palatal root space for maxillary molar implant anchorage. This is in opposition to socket preservation and socket grafting, with titanium being proven as the ultimate socket preservative material.

Biography

Dr. Traub graduated from Creighton University School of Dentistry in 1978 following which he completed a 3-year Oral & Maxillofacial Surgery residency at Cook County Hospital in Chicago, Illinois, USA. He then enjoyed a full-time solo practice in his home town of Albuquerque, New Mexico USA until the summer of 2023. More recently, he has accepted a teaching position at Creighton University Dental School as a clinical professor in the Oral & Maxillofacial Surgery department. He is on the Board of Directors of the American Institute of Oral Biology (AIOB), still practices surgery part-time in Albuquerque, and is becoming certified by the International Academy of Independent Medical Legal Evaluators, being the first in his field in that organization. He has placed dental implants since 1982 and still does major facial traumatic reconstructive surgery.



Soniya Singarayer1* BSc (Hons) BDS (Hons) AKC; Michelle Lin1 BDS; Rathod2 BSc (Hons) BDS (KCL) PGCert (DenEd) MFDS RCSEd; Jashme Patel3 BDS Hons (Lond) MFDS RCS Ed M Oral Surg RCS Eng

¹Dental Core Trainee Oral Surgery, King's college Hospital, London, United Kingdom ²Specialty Registrar in Oral Surgery, King's college Hospital, London, United Kingdom

³Consultant Oral Surgeon, King's college Hospital, London, United Kingdom

The importance of Pre-Sedation Assessment for Adult patients receiving Intravenous Sedation: An Audit to Assess the Quality of Documentation at Pre-Sedation Assessment at King's College Hospital, London

Acore component of high-quality dental care is to alleviate pain and manage anxiety. The anxiety related to dental treatment can be a barrier to accessing care and is a common indication for conscious sedation amongst patients aged over 16. Other indications for this include lengthy procedures, patients with a pronounced gag reflex and medical conditions that can be exacerbated by anxiety. Good quality pre-assessment recordkeeping for adult intravenous sedation is central to preventing poor treatment outcomes and ensuring patient safety. Given that recordkeeping within sedation is multifaceted, there is a potential to unintentionally miss certain aspects out. It has been highlighted that inadequate pre-assessment can contribute to poor sedation and treatment outcomes.

This audit analysed the quality of this documentation undertaken within the Oral Surgery department at King's College Dental Hospital, retrospectively looking at 120 records. Whilst areas of near full compliance was noted with medical history, treatment plan and consent, there were notable areas where compliance was lacking. These included basic observations, sedation history, indications for sedation, and preparatory information. Indisputably, this audit had illustrated that adjuncts for recordkeeping such as stickers, pro formas or aide memoires on computerised systems prove to be very useful in helping pre-assessment become more streamlined and thorough.

Biography

Dr Soniya Singarayer graduated from King's College London in 2022 with a BDS with Honours in Dental Surgery as well as an Associate of King's College qualification with a Deans commendation. She previously graduated from St Georges, University of London with a BSc with Honours in Biomedical Sciences. After graduating from dental school, she completed her Dental Foundation Training in Hertfordshire before returning to King's College Hospital to complete her Dental Core Training 1 post in Oral Surgery, Restorative Dentistry and Pediatrics.

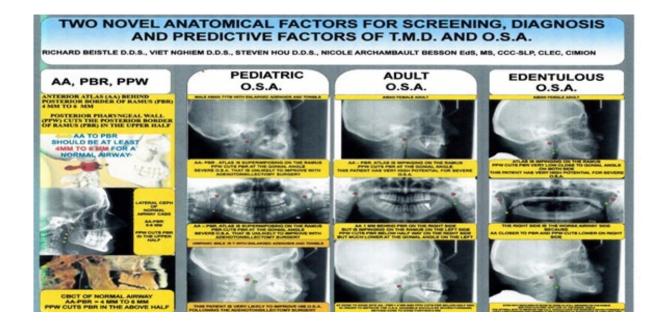
Viet Nghiem DDS

Independent Clinical Researcher, Santa Ana, California, United States

Two novel and unpublished cephalometric factors used in the screening and diagnosis of TMD and OSA

The screening, diagnosis, treatment planning and prediction of treatment outcome in Temporo-Mandibular Joint Dysfunctions (TMD) and Obstructive Sleep Apnea (OSA) cases can be achieved accurately, consistently and quite simply using a novel and unpublished cephalometric and panoramic analysis following a comprehensive clinical and medical history evaluation.

- This novel analysis will accurately pinpoint the optimal position of the mandible in space and therefore insures the maximum efficacity and minimum titration in the treatment of OSA with oral appliance therapy or even surgeries (Orthognathic Sx MMA or T&A Removal).
- This novel analysis will provide an accurate prediction of treatment outcome in the conservative or surgical treatment of OSA.
- This novel analysis will insure the success of the reconstruction fully edentulous cases whom we know now are suffering of OSA and TMD in 100% of cases.
- This novel analysis can be easily incorporated in artificial intelligence diagnosis of TMD and OSA.
- This novel analysis can be taught quickly and easily to medical and dental auxiliaries who can assist doctors in the accurate diagnosis and treatment plan TMD and OSA cases.
- The diagnosis and treatment planning of TMD and OSA can be achieved timely, accurately, consistently in the whole world and particularly in countries and regions of low resources that cannot even provide sleep study.
- This novel analysis will improve effective access to care for TMD and OSA population around the world and save trillions of dollars and precious achieving ultimate goals.
- This novel analysis will help prevention of TMD and OSA in growing childrens and adolescents of the whole world effectively, timely, consistently, quickly with practically at minimum cost and non invasive fashion.
- This novel analysis was presented for the first time at the first world congress of American Academy of Myofunctional Sciences (AAMS) in Los Angeles in 2015.



Biography

Viet Nghiem completed undergraduate studies in Paris from 1975 to 1979 and attended Paris V Dental School from 1979 to 1984, followed by UCLA Extension from 1984 to 1985. They have been in private practice in California since 1985. From 1989 to 2015, the user served as a Senior Clinical Instructor in the White Memorial Hospital, ENT Department, Craniofacial PAIN TMJ Clinic under the direction of Dr. Joseph Schames, DMD. In 1998, they discovered two novel cephalometric factors that are now used in the screening and diagnosis of TMD and OSA. The user also lectured at the First World Congress of the American Academy of Myofunctional Sciences (AAMS) in 2015 in Los Angeles. They have been the main instructor and lecturer for the United States Dental Institute, specializing in the diagnosis and treatment of TMD, OSA, Orthodontics, and Dentofacial Orthopedics. Additionally, the user has held the position of Qualified Medical Evaluator (QME) for the state of California since 1994.



Vincenzo Giorgino Studio Giorgino SRL, Italy

Myofunctional therapy in pediatric patients: A clear approach to craniofacial development for a healthy and functional smile

Introduction: Myofunctional therapy, combined with the use of silicon preformed appliances, offers a unique and effective approach to the treatment of Orofacial Myofunctional Disorders (OMDs) in pediatric patients. This innovative approach integrates principles of epigenetics and craniofacial development to promote optimal growth and development, while addressing the underlying causes of OMDs.

Rationale: During the pediatric growth period, the craniofacial complex is highly plastic and susceptible to the influence of environmental factors, including muscle function. Incorrect orofacial muscle habits, such as mouth breathing and atypical swallowing, can exert abnormal forces on the developing dentition and jaws, leading to malocclusion and other OMDs.

Mechanisms of Action: The silicon preformed appliances are designed to work synergistically with myofunctional therapy exercises to:

Correct Muscle Habits: The appliances apply gentle, targeted pressure to the orofacial muscles, promoting their re-education and retraining in correct function. This helps to normalize muscle tone and establish a balanced orofacial environment.

Facilitate Craniofacial Development: By guiding the muscles into proper function, the appliances create optimal conditions for the harmonious growth and development of the jaws and dentition. This allows for the natural eruption of teeth into correct alignment and promotes the development of a healthy and functional craniofacial complex.

Modulate Epigenetic Patterns: The mechanical forces generated by the appliances and myofunctional exercises can induce epigenetic changes, influencing gene expression and cellular processes that are critical for craniofacial development. This epigenetic modulation enhances the potential for favorable treatment outcomes and long-term stability.

Benefits for Pediatric Patients:

- The combined use of silicon preformed appliances with myofunctional therapy in pediatric patients offers a range of significant benefits, including:
- Improved Breathing and Sleep: Correction of mouth breathing and establishment of nasal breathing promote oxygenation, improve sleep quality, and reduce the risk of sleepdisordered breathing.
- Enhanced Craniofacial Development: The appliances guide the growth and development of the jaws and dentition, promoting optimal facial esthetics and function.
- Reduced Need for Orthodontic Treatment: By addressing the underlying causes of malocclusion, the early intervention with silicon preformed devices can potentially reduce the need for future orthodontic treatment.
- Improved Quality of Life: The resolution of OMDs and the development of a healthy smile can significantly improve a child's self-esteem, confidence, and overall quality of life.

Conclusion: Myofunctional therapy with silicon preformed appliances represents a groundbreaking approach to the treatment of OMDs in pediatric patients. By integrating principles of epigenetics and craniofacial development, this innovative method offers a unique opportunity to optimize growth and development, while achieving a healthy and functional smile. The benefits of this approach extend beyond the correction of OMDs, contributing to improved overall health and well-being in children.

Biography

Dr. Vincenzo Giorgino was born in Italy and graduated in dentistry in Pavia in 2007. He started using Myobrace devices in 2011, becoming the first Myobrace Certified Provider in Italy and the first certified Myobrace Educator in Italy. He is an international lecturer for Myofunctional Research Co. in Italy and Europe, teaching the MRC treatment protocol. He regularly lectures at prestigious universities, at the School of Orthodontics of the University of Insubria and at the Postgraduate Course of the University Federico II of Naples. His Myobrace cases are studied and researched by the School of Orthodontics of the University of Insubria. His vision of "Healing Malocclusion" places the correction of the dysfunction at the centre of the treatment, using Myolay and the Bent Wire System for sagittal and transverse problems, and 2D lingual or bracketless orthodontics when appropriate, for predictable and stable results. He works at Studio Giorgino srl and practices all branches of dentistry, with a particular passion for Digital Dentistry and Myofunctional Dentistry. He is a member of SIDO (Italian Society of Orthodontics), DDS (Digital Dentistry Society) and VELMENI's dental board, Myobrace Italian board.

BOOK OF ABSTRACTS





Dr. Anya Rani Sharma*, Professor Reza Vahid Roudsari Manchester Foundation Trust, Manchester, UK

Case report: A rare presentation of florid cemento-osseous dysplasia

Introduction: Florid Cemento-Osseous Dysplasia (FCOD) is a benign fibro-osseous lesion that primarily affects the tooth-bearing regions of the jaws. It is often detected incidentally during radiographic evaluations and generally does not require invasive treatment. This report describes a patient who presented with an incidental radiolucency in the Lower Left Quadrant (LLQ) and mild associated symptoms, eventually diagnosed as FCOD.

Background: FCOD is a benign fibro-osseous condition that involves the replacement of normal bone with fibrous tissue and cementum- like or osseous material. It typically affects multiple quadrants of the jaw symmetrically and is characterised radiographically by mixed radiolucent- radiopaque lesions. FCOD is most commonly found in middle-aged, black women with the prevalence of 5.5%, with a female-to-male ratio of approximately 9:1.

Clinically, FCOD is usually asymptomatic but may occasionally present with mild discomfort, particularly if secondary infection or cortical expansion occurs. Its radiographic hallmark includes radiopaque masses surrounded by a radiolucent halo, distinguishing it from other fibro-osseous lesions. Management is typically conservative, focusing on education and regular monitoring to prevent complications such as secondary infection or bone sequestration.

History & Examination: A 46-year-old patient was referred for the investigation of an incidental radiolucency at the apex of LL4. She reported occasional pain and sensitivity in the LLQ, especially on biting, but could not identify the exact tooth causing discomfort. The patient's dental history revealed hypodontia with several missing teeth. The medical history indicated that the patient was fit and well, though allergic to ibuprofen. Social history was unremarkable. Intraoral examination revealed that LL4 was slightly Tender to Percussion (TTP), with no other abnormalities in the LLQ. The overlying mucosa appeared normal, with no signs of swelling or sinus tract formation.

Radiographic Investigations: An Orthopantomogram (OPG) revealed no caries or periodontal bone loss. Root morphology appeared normal, with no unerupted teeth. However, a large mixed radiolucent-radiopaque lesion was identified in the LL3-6 region, with possible apical displacement of the inferior dental nerve. A radiolucency was noted around LL4's root, though the periodontal ligament space remained visible.

Cone-Beam Computed Tomography (CBCT) imaging confirmed the presence of characteristic mixed radiolucent- radiopaque lesions in the LL3-6 region, consistent with FCOD. These lesions demonstrated sclerotic masses surrounded by radiolucent halos, leading to the definitive diagnosis.

Conclusion: This case highlights the importance of imaging in diagnosing conditions like FCOD, which are often asymptomatic and discovered incidentally. The conservative approach adopted here emphasises patient education and regular monitoring to prevent complications, ensuring long-term stability and optimal patient care.

Management Plan: The diagnosis and benign nature of FCOD were explained to the patient. Given the absence of significant symptoms, no invasive treatment or biopsy was indicated. The patient was advised to maintain good oral hygiene and avoid unnecessary interventions in the affected region. A follow-up appointment was scheduled, with plans for a 12-month review including a left-side OPG to monitor for changes or complications.

Biography

Dr. Sharma completed her dental degree at the University of Manchester, followed by training in Manchester, building her clinical foundation. She then pursued an Academic Clinical Fellowship at the University of Liverpool in Dental Public Health. Currently, she is in Dental Core Training at Manchester Dental Hospital, focusing on complex restorative work, and Special Care Dentistry in Community Dental Services. Passionate about breaking socioeconomic barriers, Dr. Sharma advocates for accessible dental care and widening access to education for patients and professionals alike.



Grėtė Kazlauskaitė¹*, Rytis Vaitiekūnas¹, Arūnas Vasiliauskas²

¹Faculty of Odontology, Medical Academy, Lithuanian University of Health Sciences, Kaunas, Lithuania

²Department of Orthodontics, Lithuanian University of Health Sciences, Kaunas, Lithuania

Comparison of maxillary expansion outcomes using clear aligners versus rapid palatal expanders in mixed dentition patients

Maxillary Transverse Deficiency (MTD) is one of the most widespread skeletal problems in orthodontics, affecting about 21% of patients in the mixed dentition stage (Bruni et al., 2024; Lu et al., 2023). Usually, two different appliances-Rapid Maxillary Expander (RME) or Slow Maxillary Expander (SME)-have been used for treating MTD (Bruni et al., 2024; Lu et al., 2023; Lombardo et al., 2023; Torbaty et al., 2024). The Invisalign First System (IFS) is a newly introduced treatment option, specifically designed for patients in mixed dentition phase (Bruni et al., 2024; Lu et al., 2023; Torbaty et al., 2024). Therefore, there is limited research evaluating the efficacy of clear aligners compared to RME in mixed dentition. The aim of this study was to compare maxillary dimensional changes in mixed dentition patients treated with clear aligners to those treated with rapid palatal expanders.

The systematic review was carried out following the PRISMA guidelines. The PICO question was: Do rapid palatal expanders expand the maxilla better than clear aligners in mixed dentition patients? The electronic search with keywords "clear aligner" AND "rapid palatal expander" AND "mixed dentition" was performed by two authors on September 9th, 2024, using 6 databases and registers: PubMed, Google Scholar, ScienceDirect, Web of Science, Cochrane Library and ClinicalTrials.gov. Inclusion criteria: full-text research articles published less than five years ago, written only in English, randomized controlled trials, and retrospective and prospective cohort studies that evaluated maxillary expansion using clear aligners vs. rapid palatal expanders in mixed dentition patients.

The search resulted in a total of 992 research articles. After applying selection criteria, 8 full-text articles were found, 4 were included in this review for final analysis. A total of 242 patients participated in the conducted studies. Intraoral scans were taken before appliance placement and at the end of treatment, when the appliances were removed. Digital dental casts were then collected and analyzed. The results of Bruni et al. showed that expansion was greater in the RME group; however, only the intermolar width at the gingival level was statistically significant (1.58±1.53 mm vs. 3.87±1.67 mm; p<0.001) (Bruni et al., 2024). Lombardo et al. found that greater maxillary expansion was achieved with clear aligners in the intercanine width, both at the cusp and gingival levels (p<0.001) (Lombardo et al., 2023). The study by Lu et al. observed

statistically significant differences in the intercanine (1.89 ± 1.56 mm vs. 4.18 ± 2.01 mm), intermolar (2.43 ± 1.42 mm vs. 5.32 ± 1.13 mm), and second interdeciduous molar (1.93 ± 1.75 mm vs. 5.52 ± 1.31 mm) widths (p<0.05), with more efficient expansion in the RME group (Lu et al., 2023). The findings of Torbaty et al. also showed superior results in the RME group (Torbaty et al., 2024).

Rapid palatal expansion is the preferred method for achieving maxillary dental arch expansion in mixed dentition patients, whereas clear aligners may be more suitable for targeted expansion of the anterior maxillary arch.

Biography

Grété Kazlauskaité is a fifth-year dental student at the Lithuanian University of Health Sciences in Kaunas, Lithuania. With practical experience as a dental assistant in various dental clinics, she is passionate about orthodontics and has conducted in vitro research in this field. Grété has attended numerous dental conferences to broaden her knowledge. Eager to learn and improve, she is a part of Students' Scientific Society of Lithuanian University of Health Sciences and has recently joined the university's Orthodontic Club.



Rytis Vaitiekūnas^{1*}, Grėtė Kazlauskaitė¹, Dalia Smailienė²

¹Faculty of Odontology, Medical Academy, Lithuanian University of Health Sciences, Kaunas, Lithuania

²Department of Orthodontics, Lithuanian University of Health Sciences, Kaunas, Lithuania

Correlation analysis of the shear bond strength and adhesive remnant index in orthodontic adhesive systems: In-vitro study

Introduction: The success of orthodontic treatment relies on the durability and strength of adhesive bonds formed between the brackets and enamel, with Shear Bond Strength (SBS) ensuring that brackets remain attached to the teeth, particularly during masticatory movements. However, greater SBS may increase the risk of enamel fracture during bracket or adhesive remnant removal. Meanwhile, the Adhesive Remnant Index (ARI) indicates the amount of adhesive residue left on the tooth surface at the site of bracket bond failure. Minimal adhesive remnants on the tooth surface usually imposes a risk of enamel fracture. Given that both factors are related to the integrity of enamel, this implies that changes in SBS might influence ARI outcomes. Thus, this study aimed to assess a correlation between SBS and ARI scores across two orthodontic adhesive systems.

Methods: 112 extracted human molars were randomly divided into two groups (n=56) for bonding tubes with two orthodontic adhesive systems (Transbond XT and GC Ortho Connect). The Shear Bond Strength (SBS) test was conducted using a universal testing machine. The Adhesive Remnant Index (ARI) was used to evaluate the amounts of adhesive remnants on all molar surfaces. All teeth were analysed by two observers (GK and RV), and to assess the reproducibility of the ARI measurements between them, the Inter-Class Correlation Coefficient (ICC) was calculated, indicating a high agreement between the two investigators (0.98; p<0,001). Further statistical analysis was done using Student's t-test, the chi-squared test, and Spearman's rank correlation test.

Results: SBS measurements for Transbond XT ranged from 5.48 MPa to 21.51 MPa (mean-11.76 MPa), while for GC Ortho Connect, they ranged from 5.27 MPa to 18.13 MPa (mean-11.37 MPa). Higher mean SBS values were obtained with Transbond XT compared to GC Ortho Connect resin; however, it was not statistically significant (p>0.05). In the Transbond XT group, the majority of scores were 0, accounting for 44.23%. Scores of 2 were observed in 21.15% of cases, and 3 in 3.85% of cases. Whereas in the GC Ortho Connect group, all scores were either 0 or 1, with 46.81% and 53.19% respectively. When comparing the two materials, a statistically significant difference was found (p=0.002), with higher ARI scores observed in the Transbond XT group. Six cases of enamel fracture were detected, with no statistically

significant difference between the groups (p>0.05). The Spearman correlation test revealed a significant moderately positive correlation (r=0.427) between SBS and ARI (p<0.001).

Conclusion: The positive correlation between the SBS and ARI indicates that greater bond strength leads to more adhesive residue.

Keywords: Shear Bond Strength, Adhesive Remnant Index, Orthodontic Adhesives.

Biography

Rytis Vaitiekūnas is a fifth-year dental student at the Lithuanian University of Health Sciences, aiming to specialize in orthodontics after graduation. Eager to deepen his expertise, he actively participates in conferences, engages in clinical rotations, and is currently conducting research in orthodontics.



Dr. Sara Massraf^{1*}, Mr Montey Garg², Mr Ganeshwaran Sittampalam³, Jessica Kimber⁴, Dr. Fabienne Aurora⁵

¹DCT 2, Oral Surgery and Oral Maxillofacial Surgery, Great Western Hospital, Swindon, Wiltshire, United Kingdom

²Consultant, Oral Surgery and Oral Maxillofacial Surgery, Great Western Hospital, Swindon, Wiltshire, United Kingdom

³Consultant, Oral Surgery and Oral Maxillofacial Surgery, Great Western Hospital, Swindon, Wiltshire, United Kingdom

⁴Nurse, Oral Surgery and Oral Maxillofacial Surgery, Great Western Hospital, Swindon, Wiltshire, United Kingdom

⁵Oral Surgery Registrar, Oral Surgery and Oral Maxillofacial Surgery, Great Western Hospital, Swindon, Wiltshire, United Kingdom

A snapshot of basal cell carcinoma cases treated at the great western hospital: Insights from the wiltshire population

Introduction: Basal Cell Carcinomas (BCC) are the most common skin cancer, accounting for 80% of cases. This study provides a snapshot of BCCs managed in the OMFS department at the Great Western Hospital (GWH) in Swindon, analysing patient demographics, lesion locations, and histopathological features to contribute to understanding regional trends in the Wiltshire population.

Methods: A retrospective review of 92 patients undergoing excision of confirmed BCCs from March 2023 to September 2024 was conducted. Data on age, gender, lesion location, and histopathology were collected for 96 lesions, representing a subset of BCC cases within Wiltshire.

Results: BCCs were more common in males (61%), with most patients in their 70s (n=31) and 80s (n=35). Nodular BCCs were the most frequent subtype (41%), and basosquamous BCCs were rare (1%). The nose (22%) and cheek (18%) were the most affected sites. According to British Association of Dermatology guidelines, 76 of the 96 lesions were classified as high-risk. TNM staging showed 94% as pT1, 4% as pT2, and 2% as pT3.

Conclusions: This evaluation offers insight into BCC cases treated in the OMFS department at GWH, reflecting patterns in a subset of the Wiltshire population. While findings align with national trends, the high prevalence of facial lesions highlights the importance of targeted prevention and timely intervention. These insights inform local service delivery and management strategies for high-risk groups.

Biography

Sara Massraf is a Dental Core Trainee (DCT2) working at The Great Western Hospital Swindon in Oral Surgery and Oral Maxillofacial Surgery. She has previously worked as a DCT1 at Bristol Dental Hospital in Paediatric Dentistry. She graduated with Honours from Sheffield Dental School in 2022. She is a highly motivated individual who is keen to learn from the worldwide dental community.



Dr. Zachary SinagraDepartment of Plastic and Reconstructive Surgery, Sir Charles Gairdner Hospital,

Gingival angiosarcoma: A rare site of metastatic disposition

Perth, Western Australia, Australia

Angiosarcomas are a rare soft tissue tumour originating from the endothelial cells of lymphatic or vascular origin. They are aggressive, spread haematologically, and a typically associated with a poor prognosis. Intra-oral metastasis is extremely rare with gingival deposits often mistaken for other intra-oral pathologies, including pyodermic granuloma. Here, we present a case report of gingival metastatic angiosarcoma.

Biography

Dr. Zachary Sinagra is a Surgical Registrar (International Equivalent to Resident) in Plastic and Reconstructive Surgery in Perth, Western Australia. Dr. Sinagra studied Anatomy and Sports Science (BSc) at the University of Western Australia prior to completing his Bachelor of Medicine, Bachelor of Surgery (MBBS) at the University of Notre Dame, Fremantle, in 2014. In 2023, he completed a Master of Surgery (MS) by thesis at the University of Western Australia. So far, he has published five articles in international journals and has a keen interest in research and teaching.



Soniya Singarayer1* BSc (Hons) BDS (Hons) AKC; Michelle Lin1 BDS; Rathod2 BSc (Hons) BDS (KCL) PGCert (DenEd) MFDS RCSEd; Jashme Patel3 BDS Hons (Lond) MFDS RCS Ed M Oral Surg RCS Eng

- ¹Dental Core Trainee Oral Surgery, King's college Hospital, London, United Kingdom
- ²Specialty Registrar in Oral Surgery, King's college Hospital, London, United Kingdom

'I thought I was being knocked out' an exploration of patients' understanding of conscious sedation prior to oral surgery treatments

Anxiety is a significant barrier to accessing dental care, particularly for oral surgery treatments. Single drug midazolam sedation is a recognised method to manage patient anxiety. The GDC provides a clear definition for Conscious Sedation (CS). Valid consent is imperative prior to any intervention, with a patient having sound understanding of the difference between conscious sedation and general anaesthesia.

This prospective survey aims to understand patients' perception of sedation prior to undergoing oral surgery procedures under CS. Pre-operative questions were asked relating to their understanding of the effects of sedation and their interpretation of the risks, benefits and alternative options.

100 patients were surveyed over a one-month period. Most patients had an appreciation that sedation will have some impact on reducing anxiety (74%), awareness (86%), consciousness (87%) and memory loss (81%). 87% of patients felt adequately prepared for CS. 85% understood the benefits of CS and 72% were aware of risks and alternative options.

Overall, patients attending for treatment in the Oral Surgery Department at King's College Hospital had a comprehensive understanding of conscious sedation. This suggests that generally, our department is successful in providing sufficient and patient friendly information to prepare patients for IV sedation. This includes verbal instructions supplemented by a written leaflet and an online instructional video that patients watch during the consultation. Current practice in appraising patients for sedation is effective in majority of patients. Focus groups can assist in exploring further the nuances of the interpretation of sedation to further improve the patient experience.

Biography

Dr. Soniya Singarayer graduated from King's College London in 2022 with a BDS with Honours in Dental Surgery as well as an Associate of King's College qualification with a Deans commendation. She previously graduated from St Georges, University of London with a BSc with Honours in Biomedical Sciences. After graduating from dental school, she completed her Dental Foundation Training in Hertfordshire before returning to King's College Hospital to complete her Dental Core Training 1 post in Oral Surgery, Restorative Dentistry and Pediatrics.

³Consultant Oral Surgeon, King's college Hospital, London, United Kingdom





Monika Ośko
Barcelona Orthodontic World Institute, Spain

Tool-assisted myofascial release for the oral floor and tongue: Enhancing mobility and supporting frenulotomy

Theoretical Introduction:

- · Discussion of ankyloglossia as an issue limiting tongue mobility.
- The role of the myofascial system in the oral floor in tongue function.
- · Importance of the topographic anatomy of the tongue's frenulum and oral floor fascia.

Preparation for MRT Technique:

- Interview and assessment of the tongue frenulum in the context of its function.
- Use of tongue mobility assessment scales (e.g., Duran classification).
- Application of preliminary stimulation as preparation for frenulotomy.

MRT Technique in Practice

Indications for the use of MRT tools:

- Pre-frenulotomy: to stimulate the fascia.
- Post-frenulotomy: to improve tongue mobility and prevent scar formation, stimulate tissue proliferation.

Demonstration of basic MRT techniques using a tool:

- Applying pressure to specific points in the oral floor and tongue.
- Mobilizing the tongue with varying tool pressures.

Practical Application of MRT Technique

Presentation of clinical cases (with video materials showing pre- and post-treatment results):

Interdisciplinary Collaboration:

 The importance of collaboration with speech therapists and neurolinguists in patient assessment and therapy. Integration of myofunctional therapy with MRT techniques.

Practical Tips and Recommendations:

- Effective patient instructions for self-practice with MRT tools.
- Schedule and frequency recommendations for using MRT techniques.
- Role of breathing exercises and tongue resting posture in supportive therapy.

Conclusion:

- Key benefits of applying MRT techniques using tools in treating ankyloglossia and tongue mobility is-sues.
- Opportunities for further development of the technique in various therapeutic fields.

Biography

Monika Ośko is a dentist and MFS Ambassador, currently pursuing doctoral studies at the Faculty of Odontostomatology, University of Barcelona. She is the President of the Polish Society of Myofunctional Therapy and holds a Master Universitario di Secondo Livello in Ortognatodonzia Clinica Avanzata. Monika is an Orthodontic Senior Instructor and Diplomat of the International Board of Orthodontics. She has lectured extensively, including at the Barcelona Orthodontic World Institute, and co-authored therapeutic children's books like "Zgryzek i przyjaciele" and "Uwolnić Frenulo." In 2022, she founded the Polish Society of Myofunctional Therapy, promoting advancements in functional orthodontics and pediatric craniofacial development.



Robert L Karlinsey PhD

Custom Dental Formulations, LLC, Indianapolis, Indiana USA

Plaque glycolysis and regrowth methods: What it is, why it is important, and how it can help your research and formulation endeavors

Plaque Growth and Regrowth Methods (PGRM) were introduced in the mid-1990s as a creative method of demonstrating antimicrobial efficacy for Stannous Fluoride (SnF2) and Cetylpyridinium Chloride (CPC). While there are variations based on the original published model, the purposes of these are two explore the putative action with respect to either glycolysis or regrowth. While there are many agents that inhibit microbial regrowth, fewer can inhibit glycolysis. As such, those agents—such as CPC—that deliver both benefits are regarded as the most promising. This workshop will share some details of the original published 1995 PGRM model, provide insight into variations of the PGRM model, discuss how PGRM models are complementary to antiplaque and antigingivitis research and testing, and touch on specific commercially available products that may or may not demonstrate regrowth and glycolysis efficacy. In explaining applicability of these models to various agents, we will use insights and results from our Glycolysis and Automated Plaque Regrowth (GAPR) model (Karlinsey & Karlinsey. Dent. J. 2024, 12(5), 146) an in vitro model that utilizes harvested human plaque.

Biography

Dr. Robert L. Karlinsey is a scientist and formulator with almost 20 years' experience in dental research. He earned a BS in Physics (University of Scranton) and PhD in Chemical Physics (Indiana University), with postdoctoral work in physical chemistry (Indiana University). As a visiting assistant research professor at the Indiana University School of Dentistry, his research led to an impactful encounter with Dr. George Stookey, and shortly thereafter, the formation of Indiana Nanotech, LLC (now known as Custom Dental Formulations, LLC), of which he spearheaded all research and small-scale manufacturing efforts. Dr. Karlinsey is the inventor of Nanotech's functionalized tricalcium phosphate systems, which continue to help generate over \$100MM in global product sales for a major dental manufacturer. As Principal Investigator, his work has received significant funding through Federal (National Institutes of Health), State (Indiana and Texas), and industry grants and contracts. His research in patented calcium phosphate technologies continue to help generate over \$100MM in global product sales. Previously, Dr. Karlinsey has served as Chief Scientific Officer at Therametric Technologies, Inc, and adjunct professor of chemistry at the University of Indianapolis. Dr. Karlinsey addresses clients' needs in preventive and cosmetic dentistry, including fluoride- and fluoride-free remineralization, antiplaque/gum health, whitening systems, and more. He is actively involved in clinical and laboratory research designs and performance-backed, customized oral care formulation solutions. And, whenever possible, he favors natural, nature-derived, and/or sustainably sourced ingredients.

BOOK OF ABSTRACTS



Questions? Contact

Phone: +1 (702) 988 2320 | Whatsapp: +1 434 264 7183

e-mail: dentistry@magnusconference.com