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11th Edition of International Conference on

Dentistry and Oral Health

September 18-20, 2025

The Future of Dentistry: Trends and Innovations

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BOOK OF ABSTRACTS

11th Edition of International Conference on

Dentistry and Oral Health

SEPTEMBER

18-20

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ABSTRACTS

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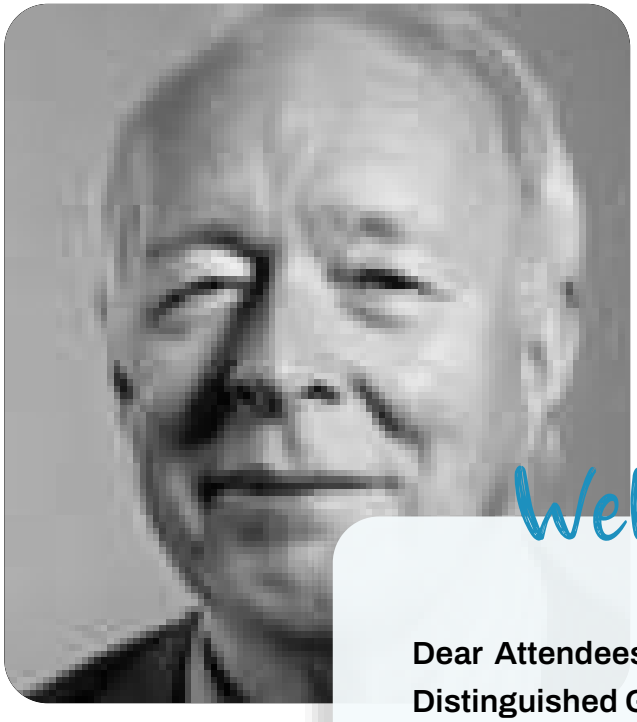
Welcome Message

Greetings and Warmest Wishes to all of you, both live and virtual attendees! Following on the heels our Spring 2025 meeting in Rome, this year's conclave in London promises to be equally, if not more, interesting and enlightening than ever before with some new speakers and topics never presented over the past ten years. If this is your first ICDO meeting prepare to be impressed. If you've attended ICDO meeting(s) in the past, you already know the quality and variety of our presentations. Lastly, I challenge any and all of you to get involved, prepare a lecture (or 2), and present it live at this ICDO 2025 meeting. I truly look forward to seeing you, both new and old, in London this Fall.

Steven J Traub
Touro University College of Dental Medicine,
United States



Welcome Message

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 ICDO 25. On behalf of the Organizing Committee, I would like to warmly welcome you to the 11th Edition of International Conference on Dentistry and Oral Health (ICDO-2025) which will be held in London, UK or alternatively on-line if you are unable to present in person. The theme of this year's conference is The Future of Dentistry: Trends and Innovations. 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 Gillam
Barts and the London School of Medicine and Dentistry QMUL, London, UK

Welcome Message

Dear Conference Attendees,

It is a pleasure to write a few welcome notes for the session entitled periodontal disease and diabetes. There is a national crisis of obesity and its related comorbidities especially type 2 diabetes with 50 percent of the UK population predicted to be obese by 2025 and serious problems with NHS dentistry. We know that there is a two-way relationship between diabetes and periodontitis and that successful periodontal treatment improves glycaemic control. Yet, as dentists, we are uanable to convince too many doctors about the support we can give when it is now clear that periodontitis is not a complication but a comorbidity. Strategies to improve both communication with doctors are our responsibility for improved plaque control are put forward.

Dr Christopher Turner
Spacemark Dental, United Kingdom

Welcome Message

Greetings respected colleagues, and esteemed dental professionals.

It is my honor and privilege to welcome you all to 11th Edition of International Conference on Dentistry and Oral Health September 18-20 | London, UK. We are truly delighted to have such a diverse and accomplished group of professionals to be gathered together for what promises to be an enriching and inspiring event. Dentistry is a field that continues to evolve rapidly — with advancements in technology, research, and patient care transforming the way we practice and serve our communities.

This conference is a celebration of that progress, and more importantly, a platform for sharing knowledge, innovation, and best practices. Over the coming days in the event, we look forward to insightful presentations, engaging discussions, and the opportunity to collaborate across specialties and backgrounds. From cutting-edge clinical techniques to emerging research and public health strategies, our agenda reflects the depth and breadth of the dentalprofession today.

I would like to extend my sincere thanks to our keynote speakers, presenters, organizers, sponsors, and every individual who will be a contributing element. Your commitment to excellence is what makes this gathering so valuable. To all our attendees — whether you are seasoned professionals or early in your careers — I encourage you to participate actively, ask questions, network generously, and take full advantage of everything this conference has to offer.

Preetinder Singh
Academy of Oral Surgery, United States

ABOUT
MAGNUS GROUP

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.

ABOUT
ICDO 2025

Welcome to the **11th Edition of International Conference on Dentistry and Oral Health (ICDO 2025)**, taking place in **London, UK**, and **Virtually** from **September 18-20, 2025**. This year's conference, themed The Future of Dentistry: Trends and Innovations. The conference offers a comprehensive program featuring keynote talks, oral and poster presentations, and interactive discussions.

As you explore this abstract book, you will find a collection of pioneering research and insights that capture the dynamic nature of this year's conference. Each abstract provides a glimpse into the significant advancements and innovative work driving progress in Dentistry and Oral Health. Whether you are participating in person or virtually, you will have the opportunity to connect with leading experts and peers, fostering discussions that will shape the future. We eagerly anticipate your engagement in this transformative event and the valuable contributions you will bring to the field.

ABOUT

CE Accreditation

The Continuing Education (CE) credits available at ICDO 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 base, and fostering networking opportunities. By attending ICDO 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 ICDO 2025 Conference not only offers ample networking chances 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.

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KEYNOTE PRESENTATIONS

Ali Al Kaissi MD, MSc. Dsc (Hon)

National Ilizarov Medical Research Center for Traumatology and Orthopaedics, Russian Federation

Syndromic associations of congenital malformations of dentition: A clinical and genetic overview

Congenital malformations of the dentition are not uncommon in both children and adults, particularly when associated with heritable syndromic conditions. In this presentation, we aim to highlight the strong connection between developmental dental anomalies and a wide variety of genetic syndromes. We focus on the underlying genetic causes of abnormal dental development and emphasize the importance of establishing an accurate clinical diagnosis as early as possible. Abnormally shaped teeth, oligodontia, or dentin defects often form part of a broader syndromic presentation.

A comprehensive review of PubMed and specialized textbooks revealed more than 303 syndromic entities in which congenital dental maldevelopment is a significant feature. One of the common examples is Christ-Siemens-Touraine syndrome (X-linked hypohidrotic ectodermal dysplasia), the most prevalent form of ectodermal dysplasia. Affected males typically have normal intelligence but exhibit sparse scalp hair, eyebrows, and eyelashes, lack of body hair, and an inability to sweat, which can result in recurrent high fevers during infancy. Dentition is markedly affected, with most teeth missing and those present often displaying a conical shape. Additional features may include progressive hyperpigmentation, dry skin around the eyes, prominent forehead, saddle nose, full lips, and a hoarse voice. Female carriers may show subtle signs such as sparse hair or abnormal dentition, including oligodontia and altered tooth morphology.

Biography

Ali Al Kaissi MD, MSc, Dsc (Hon) bases much of his work is centered on one simple rule that every skeletal deformity/abnormality must have an underlying causality that needs to be explored and addressed. This stems from the conviction that the vast majority of the skeletal deformities-if not all-do not occur randomly. His clinical experience resulted in more than 220 published papers in peer reviewed medical journals and five Breakthroughs in Medicine. Al Kaissi Syndrome (OMIM: 617694); Al Kaissi et al, 3MC syndrome, (OMIM 257920); Al Kaissi Novel Type of Desbuquois syndrome (AJMG 2005); Al Kaissi Novel conception of Wormian Bones Diagnostics J. Basel-(2023).

Another key example is dentinogenesis imperfecta, a major dental manifestation in children and adults with osteogenesis imperfecta. Here, we present clinical and radiological findings from selected families to illustrate the spectrum of phenotypic features associated with these syndromes. Our aim is to reinforce the need for early diagnosis and multidisciplinary management to optimize patient care and genetic counseling.

Professor Arupratan Choudhury BDS, Phd, FDSRCS (England)

Hon Senior Consultant, Birdem General Hospital, Dhaka, Bangladesh

Good dental health is important for diabetes people

Problems with teeth and gums can be more common for people with diabetes, so good dental health is important to prevent dental complications developing. Looking after your teeth and gums is an essential part of learning to live with both type 1 diabetes and type 2 diabetes.

You should inform your dentist if you have either new-onset or long-standing diabetes as this might affect your dental treatment and how often they must review your teeth and gums.

People with diabetes who have poor control of their blood glucose levels are more likely to develop dental health problems. Therefore keeping your blood sugar within a normal range will reduce this risk. Eating a balanced diet, getting regular exercise and giving up smoking is also advised to lessen the risk of oral health problems.

Making sure that you visit a dentist every six months ensures that any infection will be treated as early as possible. Minor dental problems can quickly escalate, and a routine visit to the dentist will pick up on these.

In the UK, although people with diabetes are more prone to dental problems, they do not receive any extra financial help for dental treatment.

Having prolonged high blood glucose levels can increase the risk of oral health problems, such as gum disease.

Biography

After graduation in 1976, Dr. Arup started his career as a Dental Surgeon under the Ministry of Health, Government of Bangladesh and served in different district hospitals. He started health education programs in different electronic media like radio, television and published articles on dental health & tobacco hazards in national daily newspapers. Dr. Choudhury formed an NGO known as MANAS in 1989 on tobacco control and drug abuse Prevention. He Presented 38 scientific papers in international seminars and published 11 books on Dentistry, AIDS, Tobacco hazards, Diabetes & Drug abuse. At present He is a member of National Drug Control Board and National Tobacco Control Task Force of Bangladesh Government. Professor Arup Ratan Choudhury's research & clinical works is focused on the management, treatment & prevention of medically Compromised patients. He has published many scientific papers and international presenter with on output of over 38 scientific papers presentation in international

Gum disease, also known as periodontitis, is the sixth most common disease in the world. It occurs when bacteria within the mouth begins to form into a sticky plaque which sits on the surface of the tooth.

Having prolonged high blood glucose levels can lead to gum disease developing or worsening more quickly, but keeping your levels within a normal range reduces the risk of infection spreading.

Unfortunately, when your body begins to fight an infection, blood glucose levels will usually rise in response. Should the infection in your mouth become worse, you could have problems with food intake, which might affect your diabetes management.

Dental Treatment and Blood Sugar Levels

If you are on medication that can lead to hypos, such as insulin or sulphonylureas, speak with your dentist or your doctor to see if your medication will need to be modified before the dental work.

Your appointments for dental treatment should be arranged to fit in with your diabetes treatment regime.

High blood sugar levels may affect the time the gums take to heal. For example, if you have a tooth removed, and it is taking an unusually long time to heal, you should immediately contact your diabetes healthcare team or dentist for advice.

Dental Hygiene, Diabetes, and Heart Problems

Diabetes can lead to excess cholesterol building up in the bloodstream, raising the risk of heart disease.

A number of studies have shown that people with gum disease may have a higher risk of heart disease. Bacteria and inflammation in the gums may escape into the blood system and cause blockages in the blood vessels, which reduce blood flow to the heart.

Seminars and published 11 books as author. His teaching activity includes lecturing and examining graduate & post graduate medical & Dental students of Bangladesh. Dr Choudhury received second highest national award of Bangladesh Ekushe Podok for his outstanding contribution in social work. The most remarkable and tremendous achievement of Dr AR Choudhury is receiving the International Award from World Health Organization (WHO) – Tobacco or Health Medal in recognition of his concept of Tobacco free Society. Arup Ratan Choudhury is an exception achiever, specialist dental surgeon, humanist, media compare as well as a noted singer of Bangladesh. Who has devoted his life to the service of mankind, was born in 1952. He has shown a remarkable contribution in management of medically compromised patients and scientific research during the last 25 years. As a Dentist -cum social worker, Dr Arup Ratan Choudhury splits his time in Bangladesh between studying Dental disease in Diabetics and doing the works of anti tobacco movements and drug abuse. Dr Choudhury is a versatile genius and one of the popular television radio performer and presenter of health education program and vocal singer in Bangladesh since 1971 and frequently appears on Bengali television and radio programs. He obtained BDS from Dhaka University, WHO Fellowship from London University (England) in Dental public health in 1982-83, PhD from Dhaka University in Dentistry and nutrition 2000, Research Fellowship in Oral Biology and pathology from State University of New-York at Stony-Brook, NY, USA-1992-93.

More research is being carried out to further investigate the effect of gum disease on the heart.

Dental Hygiene Tips and Facts

These 10 tips and facts will help you to maintain good dental health:

1. Brush your teeth last thing at night and at one other time in the day; the most important brush is the one at the end of the day.

2. You should use small brushes or floss once a day to remove the plaque from in-between your teeth, preferably before toothbrushing.

3. Fluoride in toothpaste keeps the teeth strong and prevents dental decay.

4. To prevent dental decay you should reduce the frequency of sugary snacks and carbonated drinks.

5. After brushing spit out don't rinse the excess toothpaste away–this will keep fluoride on your teeth.

6. The mechanics of brushing your teeth makes it better at removing dental plaque and maintaining healthy gums than using mouthwash.

7. Water is the only drink that you should take to bed at night.

8. A timer can be useful to make sure you brush for a full 2 minutes.

9. If you are diagnosed with gum (periodontal) disease, your blood sugar control may be more difficult to manage, but effective gum treatment can help to improve it.

10. Your teeth and gums should be checked by a dentist at least once a year; the dentist will advise how often you should attend the dentist or hygienist for treatment.

Read more on effective oral health techniques

Visiting the Dentist

Many of us become a little anxious before a dentist appointment but don't be tempted to put off a dentist visit. If some treatment is needed, it will be less serious than if the treatment is put off.

Make sure your dentist knows you have diabetes as they may need to take this into account when they give advice or recommend treatment.

Dr Bennete Fernandes

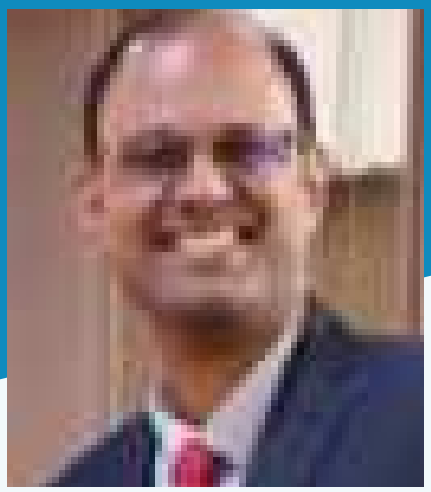
SEGi University, Malaysia

Beyond the beam: Transforming dentistry with multiwavelength technology

Multiwavelength diode laser technology has evolved into a cornerstone of modern minimally invasive dentistry, offering clinicians unmatched versatility, efficiency, and precision in everyday practice. Unlike single-wavelength systems, multiwavelength diode platforms—often integrating 450 nm, 810 nm, 940 nm, and 980 nm—enable targeted interaction with a range of chromophores, allowing for optimized outcomes across multiple clinical indications.

The absorption characteristics of diode wavelengths vary significantly, with shorter wavelengths (e.g., 450 nm) showing enhanced affinity for hemoglobin and pigmented tissues, while longer wavelengths (e.g., 980 nm) exhibit deeper penetration. This variability allows the clinician to select the ideal wavelength or sequential wavelength combinations for procedures such as periodontal pocket decontamination, sulcular debridement, peri-implantitis therapy, gingival recontouring, frenectomy, and photobiomodulation (PBM). In daily clinical workflows, multiwavelength diode systems offer rapid switching between settings, enabling seamless adaptation from high-power cutting modes to low-level therapeutic applications. This adaptability not only streamlines chairside efficiency but also enhances patient comfort, reduces bleeding, and shortens postoperative recovery times. Emerging literature supports the use of multiwavelength diode protocols for superior bacterial reduction, improved healing profiles, and adjunctive benefits in regenerative dentistry. For clinicians, the technology represents an

Biography



Dr Bennete Fernandes graduated in 1999 and completed his Masters in Periodontics from the prestigious JSS Dental College, Mysuru, Karnataka, India in 2004. He was also awarded an honorary Ph.D (h.c) in Medical & Health Professions from International Internship University (IIU) in Nov. 2021. He has 17 plus years of teaching experience following his masters. He has won 40 plus different dental awards and has published more than 35 papers in various indexed and peer reviewed journals. He has been a Guest speaker at numerous international conferences and webinars. He is a Full Member of the British Society of Periodontology & Implantology (BSP) and many other Periodontal and Interdiscplinary Societies worldwide.

opportunity to expand service offerings without investing in multiple separate laser units.

This presentation will focus on evidence-based applications of multiwavelength diode lasers, illustrated with clinical cases and protocol guidelines. Attendees will gain insights into wavelength selection strategies, safe parameter optimization, and maintenance tips for maximizing device longevity. By harnessing the full spectral potential of diode laser technology, practitioners can elevate treatment outcomes, enhance patient satisfaction, and set a new standard for soft-tissue management—truly taking diode laser dentistry *beyond the beam.*

Christopher Turner

Spacemark Dental, United Kingdom

Periodontitis: A co-morbidity factor in diabetes mellitus. The implications for dentistry

In 1999 Periodontal Disease (PD) was thought to be the sixth complication of Diabetes Mellitus (DM) because this latter group of patients has a 3–4 times greater risk of developing PD when compared with non-diabetics. This rises to 10 times for smokers.

More recent research has concluded that DM and PD are inter-related, one disease affecting the other and vice versa. The exact mechanism is probably related to inflammation as similar blood markers are raised in both diseases, the dental origin of which is from micro-organisms in mature dental plaque.

From the medical point of view there are five complications of DM namely cardiac, vascular, renal, ophthalmic and neurological that can be visualised as a simple hub called DM with spokes for the above complications.

However, the evidence has shown that the severity of all these five complications is worse when patients have active, uncontrolled PD. When PD is treated, there is an improvement in glycaemic control. Good oral hygiene is a critical component of glycaemic control.

These results have led to the conclusion that both DM and PD should be hub diseases. Therefore, PD is not a separate complication of DM or spoke but a co-morbidity factor acting by: modifying the severity of another disease and modulating the severity of diabetic complications in the manner of a volume switch, a new model relationship. When DM and PD are treated together there may be a synergistic effect.

Biography

Dr. Christopher Turner qualified from the Royal Dental Hospital of London with the degree of Bachelor of Dental Surgery with distinctions in 1968 and spent the first few years working in general practice before undertaking higher training in restorative dentistry in London and Newcastle upon Tyne. During this time, he passed the Fellowship in Dentistry examinations of the Royal College of Surgeons of England and gained his Master of Dental Surgery degree. In 1979, aged 34 years, he was appointed as a Consultant/Senior Lecturer in the University of Sheffield Dental School with the remit to establish new Department and a self-contained multi-surgery unit, separate from the School, for final year dental students to help them make the transition to qualified general practitioner. This was the first unit of its kind in the UK, has been copied and continues in the same building today. Then in 1984, he moved to an NHS appointment as Director of Dental Services in Salisbury. He took early retirement from the NHS in 2000 to establish a multidisciplinary private referral practice before retiring in 2012. He has always had an interest in prevention and plaque control and

A method of sharing results between doctors and dentists is proposed. Dentist have an important role to play in prevention. A method of effective and efficient control of interdental plaque will be presented.

the links between diabetes mellitus and periodontitis, and is the inventor of the Chooseabrush® method to help patients with gingival recession optimise their oral health.

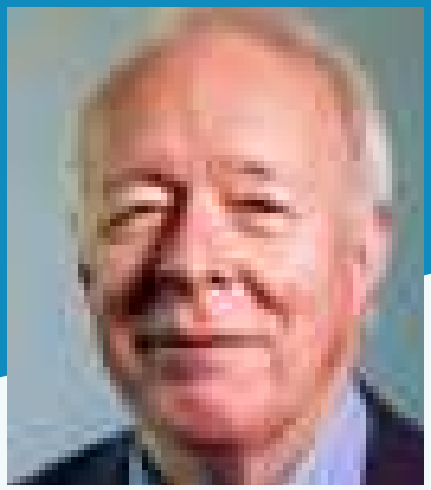
David Geoffrey Gillam

Barts & the London School of Medicine and Dentistry, QMUL, London, UK

Diagnosis of selected dental conditions with similar pain characteristics: Do we need to redefine our terminology? A personal view

The aim of this presentation is to highlight the problems that clinicians may have in diagnosing dental conditions, particularly those conditions with similar pain symptoms. One of the problems confronting the clinician when attempting to diagnose different dental conditions is that both the terminology and definitions for the conditions are often confusing. From a diagnostic perspective precise terminology and definitions are important if we are to be consistent with our diagnosis in resolving our patients' dental pain. To my understanding this is not simply a question of semantics but of consistency when using terminology/definitions, and hopefully the recommendations proposed in the presentation will enable clinicians to universally describe dental conditions and subsequently proscribe the appropriate treatment. It is evident however, that in some disciplines (e.g. oral medicine) there is still some disagreement and confusion in the current classification, and this will be addressed in the presentation. Other dental conditions where the pain symptoms are similar and where confusion in terminology may exist will also be addressed and recommendations proposed to clarify any potential problems when attempting to provide a definitive diagnosis for the patient's complaint.

Biography



David Geoffrey Gillam graduated from Edinburgh Dental School in 1977 and has been actively involved in Dentistry for over 45 years. He has worked in both clinical practice and university dental hospitals, as well as in industry (1998-2001), initially with SmithKline Beecham and later with Block Drug Company. From 2003 to 2008, he worked with a Clinical Research Organization as a Research Dentist. He also served as a full-time Clinical Reader (Associate Professor) in Translational Research related to Dentistry at Bart's and The London School of Medicine and Dentistry, QMUL in London (2009-2022). Currently, David is a part-time Professor at QMUL, although he no longer practices dentistry. His primary research interest lies in Periodontology, particularly the management of dentine hypersensitivity, and he has also developed an interest in the development of dental materials for both professional and consumer use. David has published over 100 papers on various dental topics and has contributed to several books, both as an Editor and as a chapter contributor.

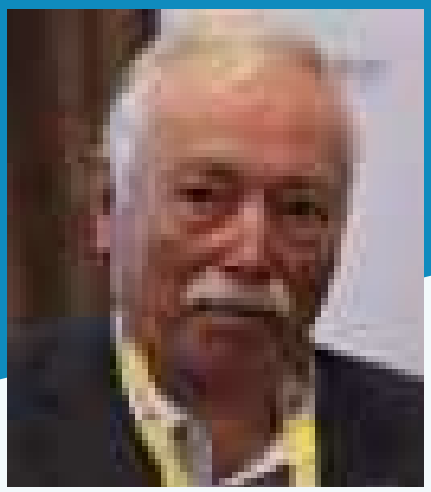
Dr. Jaap Boehmer DMD

Rijnstate Hospital, Arnhem, The Netherlands

Prevention in the Netherlands 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. Non smoking actions, COVID vaccination maesures and long COVID treatment. Also, critical percentages of vaccinations of, babies and young children are discussed. Other fields of medicine with prevention measures also. Specially in dentistry, the dental profession succeeded to get for the youth till 18 Years, nearly no decay. Also the decay from allochtone children is diminishing. 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 idee, 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.

Jackson Martins Kalinoski

Director of the Periodontology of Implants Clinica Odontologica, Toledo, Paraná, Brazil

Strategic surgical planning for soft tissue reconstruction with gingival graft using the tunnel technique

This presentation teaches how to develop a strategic surgical plan for soft tissue reconstruction with gingival tissue graft in different types of gingival defects around teeth and implants using the minimally invasive approach, the tunnel technique. This technique has been widely disseminated and widely applied worldwide by leading periodontists, especially when there are three-dimensional gingival defects involving loss of interproximal tissue and gingival papillae. It will highlight the main pillars that support the success of a gingival graft, such as how to approach and prepare a surgical recipient and donor area of gingival tissue with the philosophy of the minimally traumatic approach, understanding the indication for this technique, taking into account the architecture of different soft tissue defects, elucidation of preoperative root and prosthetic preparations, and the technical details of the various types of incisions, instruments, scalpel micro-blades, suture's structural properties that influence the type of anchorage and how these are made using modern fixation techniques that make all the difference in postoperative results and enable aesthetic corrections of the gums and gains in gum volume.

Biography

Dr. Kalinoski studied Dentistry at the State University of Londrina, UEL, Brazil, and graduated as DDS in 2004. Post graduated as specialist in Periodontics from the State University of Londrina in 2006 and Implandontology at University Cruzeiro do Sul, UNICSUL in 2008. Have already 20 years professional experience. He currently owns a private dental clinic, also acts as a clinical dentist, performing care in various Dentistry specialties. He currently promotes advanced courses in bone and gingival reconstructions for dental surgeons and at the same time, which serves specialties being responsible for the areas of periodontics and implantology.

Khoa Le[1*], Dr Sen Le[2]

[1]Eyes of AI, Chief Executive Officer, Australia

[2]Eyes of AI, Chief Clinical Officer, Australia

AI-powered innovations shaping the future of dentistry

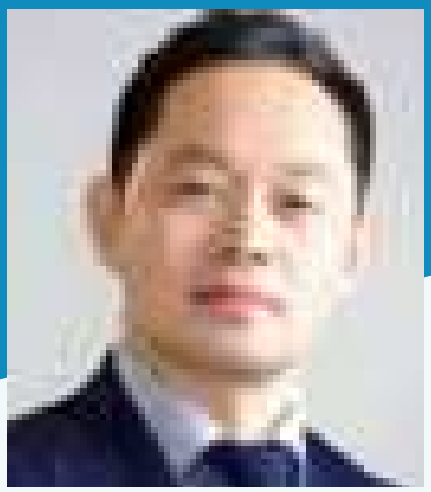
The integration of Artificial Intelligence (AI) into dental diagnostics and treatment planning marks a transformative era in modern dentistry. As patient expectations grow for precision and efficiency, AI emerges as a pivotal tool in enhancing clinical workflows, improving diagnostic accuracy, and personalizing 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 latest advancements in AI-driven dental technologies, focusing on automated diagnostic systems and predictive treatment planning. We discuss the emerging role of multimodal reasoning, where AI integrates radiographs, clinical photographs, and clinical notes to deliver richer, more detailed clinical insights. AI-powered intelligent triage systems can also efficiently channel patients to the most suitable clinicians, substantially reducing wait times.

Furthermore, we explore how large language models facilitate rapid interpretation of extensive research data. These models quickly formulate hypotheses, address complex questions, and synthesise scientific literature, significantly accelerating dental research and decision-making processes.

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-the-art machine learning algorithms, specially tailored for various sectors including finance and healthcare, with a particular emphasis on enhancing the accuracy and efficiency of computer vision systems for X-ray analysis.

By combining advanced AI technologies with established dental expertise, there is significant potential to improve patient outcomes, promoting better oral health and overall quality of life. This presentation underscores the transformative capabilities of AI-driven precision dentistry and outlines a vision for the future of modern dental care.

Prof. Dr. Laurindo Moacir Sassi PhD, MSc

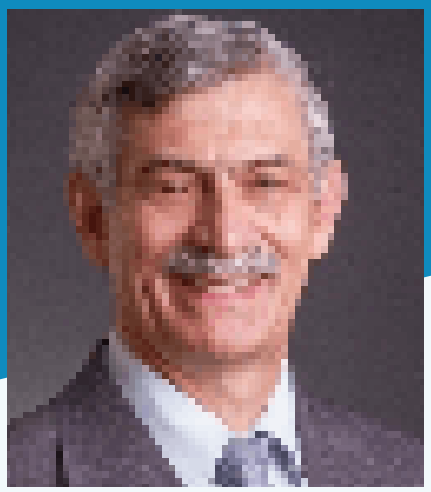
Erasto Gaertner Hospital Cancer Center; Mackenzie Evangelical University Hospital; Pontificia Universidade Católica do Paraná (PUC-PR)

A new approach in reconstruction of the middle third of the face and mandible with a microvascularized fibular flap

Introduction: The resection of facial tumors that affect the maxilla and mandible has left significant sequelae. But the question arises: What factors contribute to large resections of oral tumors? Are they tumors that affect the face and make us more sensitive to their destruction, and are they caused by failure in prevention? Each surgical process is a challenge, especially when there is a great reconstruction to be carried out due to the anatomical defect created by the resection of cancer in the region of the head and neck, 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 through the return of masticatory function, speech, and aesthetics. Reconstructions with microvascularized fibula flaps are a routine in our institution, which makes us seek alternatives to provide greater comfort to patients, covering issues of return to function and aesthetics, which is a challenge for each patient, since the main objective is to improve quality of life and provide the patient's reintegration into society.

Objective: To demonstrate reconstructions with microvascularized fibular flaps in large defects in the mandible and a new technique for reconstruction of the zygomatic-maxillary complex and orbital floor, due to the difficulty of rotating soft tissues and the pedicle.

Biography



Prof. Dr. Laurindo Moacir Sassi– DD, MSc, PhD. Oral & Maxillofacial Surgery; PhD; MSc; DDS; Department's Chief Oral and Maxillofacial Surgery (Chief in Chair Oral and Maxillofacial Surgery). Erasto Gaertner Hospital Cancer Center-Curitiba–PR-Brazil; Residence Coordinator of (CTBMF)-Erasto Gaertner Hospital Cancer Center; Member of the (CTBMF) Service-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; Member International Journal of Oral & Maxillofacial Surgery; Book Author: 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.

Method: 1- For patients who require complementary therapy with radiotherapy, there is a safety period to perform or indicate radiation 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 harvesting the free fibular flap in the standard form, differentiated osteotomies, modeling and arrangement of the fibular bone segments are performed at the recipient site of the middle third of the face.

Result: These variables in the reconstruction technique of the microvascularized fibular flap resulted in a satisfactory result in aesthetics and function.

Conclusion: These variables in the reconstruction technique of the microvascularized fibular flap with satisfactory results in aesthetics and function, especially when we fail to prevent oral cancer. The new techniques presented have the advantage of requiring only one flap in reconstruction, thus resolving the technical difficulties of the middle third of the face. It is believed that the technique described can contribute to the return of function, anatomy of the maxilla and mandible, speech and aesthetics of the patient, in addition to aiding in the recovery of newly formed bone tissue.

Biography

Preetinder Singh

Academy of Oral Surgery, United States

Analysis of LANAP® and LAPIP® - Minimally invasive periodontal and peri-implantitis treatment protocols

LANAP-Laser-Assisted New Attachment Procedure, which incorporates free running pulsed Nd: YAG laser, promotes the elusive goal of regeneration of the attachment apparatus facilitating true regeneration. LAPIP-Laser-Assisted Peri-Implantitis Procedure as a modification of LANAP which could be used in diseased implants. Laser, removes inflamed pocket tissue, disrupt biofilms, and decontaminate the root/implant surface. Both LANAP and LAPIP are minimally invasive procedures. LANAP and LAPIP treatments have revolutionized the approach to periodontal disease and dental implant care, offering minimally invasive, highly effective solutions.

Preetinder Singh (MDS) is 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 by 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.

Steven J Traub

Touro University College of Dental Medicine, United States

Facial trauma 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

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. He is a clinical instructor in the Oral & Maxillofacial department at the Touro University College of Dental Medicine (New Mexico campus).

Shira Nahon[1], Shalva Goldenhersh[1], Irene Berger[2], Dr. Zvi Loewy[2,3*]

[1]Touro University, Lander College for Women, New York, NY, United States

[2]Touro University College of Pharmacy, New York, NY, United States

[3]School of Medicine, New York Medical College, Valhalla, NY, United States

Oral microbiome in health and disease

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.

While different types of medical devices harbor microbes, 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. Chronic Obstructive Pulmonary Disease (COPD) is the third leading cause of death world-wide. COPD manifests as an inflammatory condition involving the airways, lung parenchyma and pulmonary vasculature. COPD exacerbation correlates with bacterial colonization of the upper and lower airways. One of the key bacteria implicated in COPD is *Haemophilus influenzae.*

Biography

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

In this study we focus on: (a) the identification and characterization of a commensal bacteria that elicits a strong anti-*Haemophilus influenzae* response; (b) establishing a model dental test system to evaluate the antimicrobial effect; and (c) characterize the anti-microbial effect using several different dental materials.

BOOK OF ABSTRACTS

11th Edition of International Conference on

Dentistry and Oral Health

SEPTEMBER

18-20

ORAL PRESENTATIONS

Alisha Amin[1*], Thushara Thayaparan[2*], Dylan Patel[3*]

[1]Specialty Registrar in Orthodontics, Buckinghamshire NHS Trust

[2]Specialty Registrar in Special Care Dentistry, Surrey and Sussex Healthcare Trust

[3]Specialty Doctor in Special Care Dentistry, University College Hospital

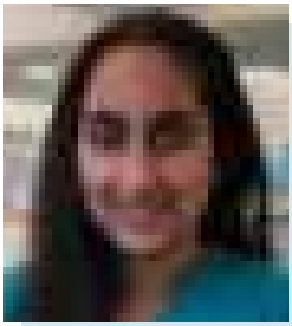
Canine conundrums: A collaborative approach to the management of ectopic canines

Introduction/Background: Ectopic canines, with an incidence of 1.7% (Ericson and Kurol, 1986), present a common diagnostic and therapeutic challenge that requires the collaborative expertise of orthodontics, oral surgery, and special care dentistry. Unilateral ectopic canines are more common, with only 0.3% being in the mandible. 84% are palatal (Peck et al. 1994) which can pose a multitude of surgical difficulties, complicated further by complex medical histories. This presentation will delve into the aetiology of ectopic canine, clinical and radiographic findings to aid diagnosis, the various treatment options and their potential complications as well as highlighting the importance of patient factors.

Summary of Cases: This presentation reviews a series of cases involving ectopic canines, including medically complex patients, cases with unfavourable canine positioning precluding alignment, cases with associated pathology, and instances of canine transposition. The focus is placed on the critical role of a multidisciplinary approach in evaluating patient-specific factors, assessing surgical risks, and determining appropriate treatment options.

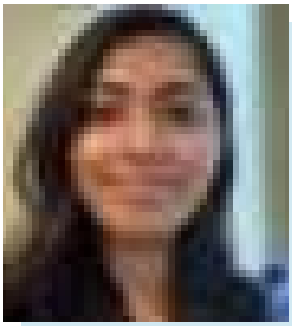
Advances in diagnostic imaging, particularly the use of Cone-Beam Computed Tomography (CBCT), are also discussed regarding their influence on diagnosis and treatment planning. Additionally, criteria for prognostic assessment of ectopic canines are examined to guide clinical decision-making with reference to national guidance and scientific literature.

Conclusion: As this case series will demonstrate, ectopic canines often present a complex clinical conundrum, challenging practitioners with their variable presentation and potential impact on function and aesthetics. Effective management requires careful diagnostic assessment and a coordinated, multidisciplinary treatment approach. Such collaboration not only facilitates the delivery of gold-standard clinical outcomes but also ensures a holistic, patient-centred model of care that addresses both the clinical and psychosocial needs of each individual.



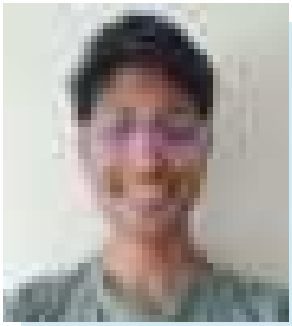
Biography

Dr. Alisha Amin graduated from Kings College London in 2021. She completed her dental core training in Oral and Maxillofacial surgery as well as Paediatric dentistry. She is currently a specialty registrar in Orthodontics with a keen interest in cleft care. She has completed a multitude of quality improvement projects and is dedicated to play an active role in improving care for her patients. To supplement her clinical roles, she has completed then MFDS qualification with the Royal College of Surgeons of England.



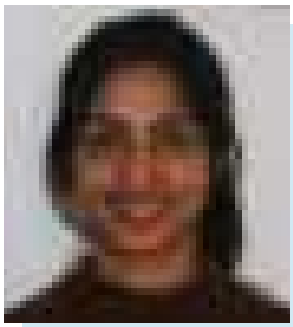
Biography

Dr. Thushara Thayaparan studied dentistry at King's College London and graduated in 2021. She completed her dental core training year in Oral and Maxillofacial Surgery and Community Dentistry. Following this, she worked for two years within the Community Dental Service in Surrey, gaining valuable experience in treating patients with complex and additional needs. She is currently a specialty trainee in Special Care Dentistry, where she continues to develop her clinical expertise. She is passionate about providing high-quality dental care to vulnerable patient groups and has a keen interest in service improvement and multidisciplinary care.



Biography

Dr. Dylan Patel graduated from King's College London in 2021 and has further training within oral surgery and special care dentistry. He completed Dental Core Training in Oral and Maxillofacial Surgery at Queen Alexandra Hospital, in addition, earning Membership of the Faculty of Dental Surgery. He further trained in Special Care Dentistry at Cardiff Dental Hospital while completing a Postgraduate Certificate in Medical Education. Currently, Dylan works as a Specialty Doctor at University College London Hospital, providing care in haematology and oncology services. His interests lie within oral surgery, multidisciplinary management of medically complex patients, and education.



Alisha Paul
South Devon NHS Trust, United Kingdom

Mounjaro and beyond: Dental considerations for GLP-1 receptor agonists

The rising use of Glucagon-Like Peptide-1 (GLP-1) receptor agonists - commonly known as ‘skinny jabs’ or ‘weight loss injections’ - has brought these medications into more mainstream clinical use across the United Kingdom. Licensed for the management of Type 2 Diabetes and Obesity, their systemic benefits are well documented. However, their potential implications for oral health remain less explored.

This piece highlights key clinical observations and practical considerations for general dental practitioners, including possible oral side effects and implications for treatment planning. As the use of GLP-1 receptor agonists continues to grow, dental teams must be adapt their knowledge and approach to reflect this evolving aspect of patient care.

Biography

Alisha Paul studied Dentistry at Queens University Belfast and graduated with BDS in 2021. She has since joined the Royal College of Surgeons Edinburgh and is currently an Oral and Maxillofacial Dental Core Trainee at a district hospital in Southwest England.

Dr. Amitha H. A

Department of Pediatric and Preventive Dentistry, V.S. Dental College and Hospital, Bengaluru, India

Comparative evaluation of the fluoride content in plant-based and animal-based milk: An in-vitro study

Fluoride plays a crucial role in preventing dental caries but, when consumed in excess, can lead to dental fluorosis. With the increasing consumption of plant-based milk alternatives like almond, oat, and soy milk, it is essential to analyze their fluoride content compared to traditional animal-based milk sources. This in vitro study aimed to evaluate and compare fluoride levels in commercially available plant-based and animal-based milk. Samples of cow, buffalo, and goat milk were analyzed alongside oat, almond, and soy milk using the SPADNS spectrophotometric method. Results showed that fluoride was absent in oat and soy milk, while almond milk contained 1.16 mg/L. Among animal-based milk samples, cow's milk had the highest fluoride content (1.39 mg/L), followed by buffalo milk (0.99 mg/L) and goat milk (0.57 mg/L). The findings suggest that while plant-based milk generally contains lower fluoride levels, almond milk had a notable fluoride presence. Additionally, animal-based milk, particularly cow's milk, exhibited fluoride concentrations that could contribute to overall fluoride intake, particularly when consumed with fluoridated water. These results highlight the need for fluoride labeling on milk products to help consumers manage their fluoride intake, thereby reducing the risk of fluorosis. Further research is recommended to explore regional variations and dietary implications of fluoride consumption through milk.

Biography

Dr. Amitha H.A (presently working as Associate Professor in the Department of Pediatric dentistry) completed her under graduation (B.D.S) from A.B Shetty Institute of Dental Science and MDS (Pediatric dentistry) from V.S Dental and Hospital (under RGUHS Bangalore). As an undergraduate, she was a top student in the subject of Community dentistry and Oral medicine and also securing second rank in conservative dentistry under RGUHS (2002-2007). As a post graduate, she secured 5th rank in pediatric Dentistry. As an Assistant and Associate Professor in Department of pediatric and preventive dentistry in V.S dental College and Hospital. She has also undergone training in Nitrous oxide Inhalation management of Special Children. She has actively contributed to community dental health programs. Notably, she conducted an oral hygiene awareness camp at Bosco Mane Orphanage in Bengaluru, providing both dental education and essential supplies to underprivileged children. Dr. Amitha has presented at several national conferences, including the International Conference on Dentistry and Oral Health (ICDO 2022, London) and the 9th International Conference on Dentistry and Oral Health (Madrid, Spain, 2024), where she delivered an oral presentation on her research. Notably, she conducted an oral hygiene awareness camp at Bosco Mane Orphanage in Bengaluru, providing both dental education and essential supplies to underprivileged children.

Andreeva Svetlana Nikolaevna

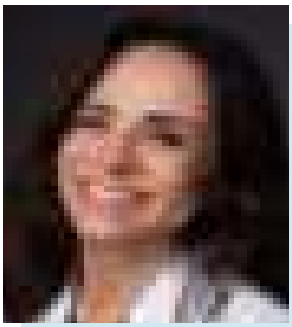
Department of Propaedeutics of Orthopedic Dentistry, Federal State Budgetary Educational Institution of Higher Education Russian University of Medicine of the Ministry of Health of the Russian Federation, Moscow

Features of judicial practice (2013-2024) in dentistry in Russia

The research is devoted to the issues of conflictology in dentistry and the peculiarities of judicial practice in Russia. Our patients' expectations of dental treatment options are quite high. This is due to the development of new digital methods of treatment, dental implantation, objectification of processes and achieved results of dental treatment. The patient's faith in the achievements of medicine does not always make it possible to understand the complexities of the clinical situation due to the anatomical features of the structure, the qualifications of the dentist, the technical capabilities of dental laboratories, etc. If the conflict between the patient and the clinic cannot be resolved, the patient goes to court to protect his interests. In Russia, the number of court cases examining the quality of dental treatment has increased dramatically over the past 10 years. In terms of the number of court cases in Russia, dentists are in second place after thoracic surgeons. This growth is caused by a number of problems within the specialty and the influence of external factors. An analysis of the judicial practice in dentistry over a 13-year period allowed us to obtain statistical data, identify the main pain points for the dentist, and the causes of judicial conflicts. Generalized figures were obtained for the main dental specialties, nosological forms, and types of treatment. This research contributed to the development of behavioral models and the development of organizational measures for the prevention of conflict situations and litigation. Understanding the most common causes and consequences of legal conflicts for dental organizations and dentists allows not only to better understand patients, but also to protect their professional interests.

Biography

Andreeva Svetlana graduated from Nizhny Novgorod State Medical Institute in 1995. She worked as a doctor, researcher and head of a dental clinic at the Central Research Institute of Dentistry in Moscow. She has a degree Grand PhD in Medical sciences and healthcare organization and a Master of Management, more than 90 publications, including 11 monographs, chapters of textbooks and national leaderships. Currently, he is a professor at the Propaedeutics Department of Orthopedic Dentistry at the Russian university of medicine, Moscow.



Anna Paula Natividade de Almeida Gonçalves

Dentistry Department, Americas Complex, AMIL group, Rio de Janeiro, RJ, Brazil

Dentistry Department, State Children's Hospital, Rede D'Or Institute, Rio de Janeiro, RJ, Brazil

Hospital dentistry in the ICU: A reality in Brazil

The critically ill patient admitted to an Intensive Care Unit (ICU) faces a series of challenges that can significantly impact their health. The severe physiological changes that occur in the body during hospitalization can be exacerbated by the presence of an inflection foci or alterations in the oral cavity. These conditions can furthermore complicate the clinical picture, directly interfering with medical management and the patient's prognosis.

Recognising the importance of oral health in the hospital context, Brazil has been promoting the inclusion of hospital dentistry teams as an integral part of multidisciplinary care. These professionals are dentists who specialize in the care of hospitalized patients, trained to deal with the various oral alterations that may arise in critical situations.

One of the most serious problems faced by patients undergoing orotracheal intubation is Ventilator-Associated Pneumonia (VAP). Related to this is the fact that the oral microbiota is altered within 48 hours after the admission of the critically ill patient, with Gram-negative microorganisms becoming predominant, and VAP is often caused by the migration of these pathogens through the tracheobronchial tree to the lungs, triggering respiratory infection.

This condition not only prolongs the length of hospital stay increasing hospital costs but is also associated with a higher mortality rate.

To mitigate these risks, it is essential to maintain rigorous monitoring and continuous care of the patients' oral health. This involves comprehensive and individualized care, starting with an initial assessment of the oral cavity at the time of ICU admission. Based on the diagnostic examination, the adjustment of the oral environment is carried out through the removal of infection foci, whether odontogenic or periodontal, which can occur at the bedside or in the surgical centre, as indicated by the medical team according to the patient's condition.

Furthermore, continuous training of nursing staff in oral hygiene practices is of a paramount importance, ensuring that daily care is performed effectively. The daily assessment of the quality of oral hygiene performed is an indispensable practice to ensure that the patient receives the best possible care, thus minimising the risks of complications associated with mechanical ventilation.

Biography

Dr. Anna Paula graduated from Unigranrio in 1994, specialized in Stomatology in 2015 at São Leopoldo Mandic College. She’s a staff member at the State Children's Hospital in Rio de Janeiro since 2013 and has been working at the Americas Hospital Complex, and in 2022 started to coordinate a Dentistry team operating at Samaritano Barra and Vitoria Hospitals. She is pursuing a master's degree in medical sciences at São Leopoldo Mandic and is certified in Laser Therapy by the same institution. She holds an MBA in Leadership, Management, and Innovation from the Pontifical Catholic University of Rio Grande do Sul.

Dr. Anurag Tripathi

Professor, Dept. of Oral Medicine & Radiology, Faculty of Dental Sciences, King George's Medical University, Lucknow 226010, India

Comparative study to evaluate chronological age and dental age in North Indian population using Cameriere method

Age estimation has its importance in forensic dentistry. Dental age estimation has emerged as an alternative to skeletal age determination. The methods based on stages of tooth formation, as appreciated on radiographs, seems to be more appropriate in the assessment of age, than those based on skeletal development. The study was done to evaluate dental age in north Indian population using Cameriere's method.

Aims/Objectives: The study was conducted to assess the dental age of North Indian children using Cameriere's method and to compare the chronological age and dental age for validation of the Cameriere's method in North Indian population. A comparative study of 02 year duration, on the OPG (using PLANMECA Promax 3D) data of 497 individuals with age ranging from 5 to 15 years was done based on simple random technique ethical approval obtained from institutional ethical committee. The data was obtained, based on inclusion and exclusion criteria, was analyzed by a software for dental age estimation.

Statistical Analysis: Student's t test was used to compare the morphological variables of males with those of females and to compare observed age with estimated age. Regression formula was also calculated.

Results: Present study was a comparative study of 497 subjects with distribution between male and female, with their dental age assessed by using Panoramic radiograph, following the method described by Cameriere, which is widely accepted. Statistical analysis in our study indicated that gender does not have a significant influence on age estimation. (R_2=0.787).

Conclusion: This infers that cameriere's method can be effectively applied in north Indian population.

Keywords: Forensic, Dental Age, Skeletal Age, Chronological Age, Cameriere's Method.

Biography

Anurag Tripathi is working as a Professor, Dept. of Oral Medicine & Radiology, Faculty of Dental Sciences, King George's Medical University, Lucknow, India, with an experience of 17 years. He has 30 publications in national and international Journals. He has received fellowship from International college of Dentists in 2023. Anurag is a member of a dozen associations of national and international level.

Dr. Arpita Shah*, Dr. Smit Jhaveri

[1]Goregaon Dental Centre, Mumbai, India

[2]Jain Hospital, Mumbai, India

Tied talks: Understanding and managing tongue tie in pediatric dentistry

Ankyloglossia, or tongue tie, is a frequently overlooked congenital anomaly characterized by a restricted lingual frenum that limits the tongue's range of motion. Though seemingly minor, it can significantly affect functions such as breastfeeding, speech articulation, swallowing, and even long-term orofacial development.

This presentation will delve into the diagnosis and multidisciplinary management of tongue tie in children, emphasizing clinical indicators beyond infancy. We will explore classification systems (e.g., Kotlow, Coryllos), functional assessments, and diagnostic criteria that go beyond anatomical appearance.

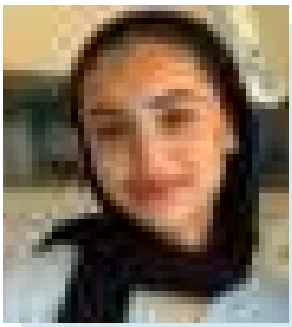
Through case-based discussions, attendees will be introduced to real-world applications in clinical practice. One featured case includes a 3-month-old infant with painful breastfeeding and poor latch, who showed immediate improvement following a frenotomy. Another case presents a 6-year-old child with speech delay and tongue thrust, treated successfully with a laser-assisted frenectomy in conjunction with speech therapy.

A comparative overview of surgical techniques—scissors, electrocautery, and diode lasers—will be presented with pros and cons in terms of precision, healing, and patient comfort. Key emphasis will be placed on behavior management, pain control, post-op care, and collaboration with lactation consultants, speech therapists, and myofunctional therapists.

The goal is to equip pediatric dental professionals with the confidence to assess, counsel, and manage tongue tie cases efficiently—bridging the gap between clinical signs and functional outcomes for better patient care.

Biography

Dr. Arpita Shah is an accomplished pediatric dentist with over 7 years of clinical experience. She practices at Goregaon Dental Centre, Bhatia Hospital, and Conwest Jain Hospital in Mumbai. She is credited with numerous accolades including the prestigious ICMR (Indian Council of Medical Research) MDS Grant and the Ratan Tata Scholarship. She is the winner of the MUHS State-Level Scientific Research Forum and has received more than 25 awards for oral paper and poster presentations since 2018. Dr. Shah is also a respected speaker at nitrous oxide sedation training programs and serves as a senior mentor for the CCRP (Clinical Case Report Presentation) program at Goregaon Dental Centre. Her passion lies in creating stress-free dental experiences and advocating for early diagnosis and management of pediatric oral conditions like tongue tie.



Asmah Omrani*, Yogesh Patel*, Mital Patel, Mitul Patel

Restorative Department, Barts Health NHS Trust, London, England

The use and evolution of 3D printed surgical decompression devices in the management of large apical lesions: A case series

Aim: To describe the use of a digital workflow in the management of large periapical lesions with the use of 3D printed decompression devices using a case series.

Summary: The development of periapical pathology is influenced by a variety of factors such as local microbiology and pathophysiology. In large lesions, orthograde endodontic treatment is often insufficient in promoting healing of the periapical tissues alone and therefore is followed by apical surgery to reduce inflammation. While traditional treatments often involve surgical enucleation, decompression techniques have been shown to provide a less invasive alternative when combined with non-surgical and surgical endodontic treatment.

This case series describes the management of five cases which have utilised a digital workflow to fabricate novel customised decompression devices in the management of large lesions. The reduction of intra-cystic pressure alongside active irrigation reduces inflammatory compounds, contributing to a reduction in the lesion size and promotion of osseus healing.

The cases encompass large apical lesions affecting maxillary anterior teeth, which are important for both function and aesthetics. They portray the use of decompression in its own right as a treatment option, whilst also discussing it's use as a key adjunct to orthograde and retrograde endodontic treatments. This improves treatment outcomes whilst minimising the need for more invasive approaches and their associated risks without increasing the rate of recurrence.

Key learning points:

- Treatment options for large periapical lesions including enucleation and decompression.
- The advantages of surgical decompression and indication for its use.
- Report on a case series which showed positive clinical and radiographic outcomes following surgical decompression across five cases.
- The use of a digital workflow in combining CBCT information with digital planning software to fabricate custom 3D printed decompression devices.
- The use of intra-lesional irrigation protocol in reducing inflammatory markers and improving healing.

- The use of decompression preceding retrograde endodontic treatment in the improvement of treatment outcomes.

Biography

Dr. Asmah Omrani earned her Bachelor of Dental Surgery (BDS) from Barts and The London School of Medicine and Dentistry in 2023. She's currently serving as a Dental Core Trainee in General Duties and Restorative Dentistry and has successfully completed Part 1 of the Membership of the Faculty of Dental Surgery examination.

Dr. Yogesh Patel graduated with honors from Barts and The London School of Medicine and Dentistry in 2023 with a Bachelor of Dental Surgery. He's currently serving as a Dental Core Trainee within Restorative Dentistry and has successfully completed the Membership of the Faculty of Dental Surgery examination.

Dr. Balamurugan.R MDS (OMFS), Fellow ICOI (USA)

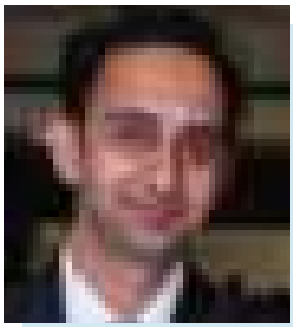
Oral and Maxillofacial Surgeon and Oral Implantologist, RYA COSMO Foundation, India

Chitosan coated implants vs conventional implants: Effects on marginal bone loss and implant stability

Dental implant placements are performed based on the osseointegration concept of Dr. Branemark. The success of dental implant ossseointegration is based on the anchorage between the implant fixture and the bone. Various surface coatings and characteristics of dental implants and its successful outcomes has been well studied in literature. This presentation deals with chitosan coated dental implants and its effects on marginal bone loss and implant stability was assessed postoperatively. Chitosan coated dental implants showed reduced marginal bone loss and better osseointegration when compared to conventional dental implants. This predominantly signifies that, chitosan as a bio active, biopolymer and biocompatible material aids to have excellent osseointegration and maintenance of crestal bone level than routine employment of titanium dental implants.

Biography

Dr. Balamurugan. R Completed his Bachelor of Dental Surgery (BDS) from Saveetha Dental College in 2014 and Masters in Dental Surgery (MDS) in the field of Oral and Maxillofacial Surgery from Meenakshi Ammal Dental College, Chennai, India in 2018. He obtained his Fellowship in Oral Implantology from International Congress of Oral Implantologists ICOI, USA in 2019. His field of expertise in basic dental treatments, dento-alveolar surgeries, maxillofacial trauma, dental implants, medical emergencies, pathologies associated with maxillofacial region, TMJ related disorders. Also, encourages and motivates the authors to explore with new innovative ideas in the field of research. Dr. Balamurugan holds various International (26) and National (12) peer reviewed paper publications that adds credit to his career. He is associated with International and National journals as editor and reviewer board member. Has been awarded as Best Editor 2021 in the Research Awards 2022 by Innovative Publication for International Dental Journal of Student's Research (IDJSR). Dr. Balamurugan was presented with the Best Achievers Award titled Excellence Award as an Oral Surgeon and Oral Implantologist by Magic Book of Record in 2022. He too obtained a Best Speaker Award at International Conference on Surgery, Anesthesia and Surgeons webinar on Midface Degloving Approach: Modifications and its use in maxillofacial surgeries held on May 25-26, 2023, USA. Dr. Balamurugan has been awarded as the Best Editor and Best Peer Reviewer for the year 2023 in the Research Awards 2024 conducted by the Innovative Publications for International Dental Journal of Student's Research (IDJSR). He was awarded as the Nex Gen Clinician in Oral and Maxillofacial Surgery at the Molaris Awards 2024 conducted by Indian Dental Association, Thiruvallur Branch, Chennai, India. He has been awarded as the International Inspiring Researcher–2024 at International Achievers Awards from Heights of Success Magazine, India. Dr. Balamurugan was awarded as the Best Young Researcher from Asia Star Rising Awards in 2024. Has been awarded as the Best Editor in the Editors week celebrations 2025 and Best Peer Reviewer in the Reviewers week celebrations 2025 for the year 2024 conducted by the Innovative Publications for International Dental Journal of Student's Research (IDJSR). Currently, he is a researcher and walks in the right path of motivation by providing a heart of service for the patients as an Oral and Maxillofacial Surgeon and Oral Implantologist in RYA Madras Cosmo Foundation Hospital, Chennai, India.



Dr. Bharat Joshi

Department of Periodontology, MMCDSR Mullana Ambala Haryana, India 133207

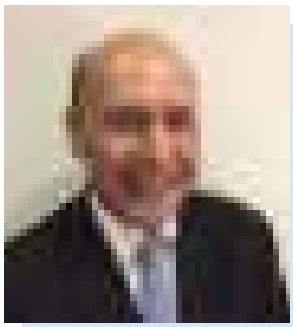
Coronally advanced flap a predictable procedure for gingival recession management - A case series

Oral health is not limited on maintaining merely good hygiene but is also dependent upon mastication efficiency and harmonious occlusion. There can be various factors which affect the mastication efficiency including mal-positioned tooth, tooth brush trauma and root denudation. Root denudation is often accomplished with hyperemia and tooth sensitivity which causes gingival recession. It is usually associated with accumulation of dental plaque and forms the basis of clinical attachment and tooth loss, ultimately leading to tooth extraction and bone deformities. The overall impact is not only loss of masticatory efficiency but also psychological depression affecting personal confidence also. Since esthetics is considered as part of individual physical development, so gingival recession is a major hurdle for maintaining individual esthetic health. Although, there are a variety of treatment options available for gingival recession ranging from the free gingival grafts to lateral pedicle grafts, advanced flaps have an additional benefit of providing good esthetic outcomes. Coronally advanced flap is a typical example which has been used extensively to provide good colour blending and is often associated with less comorbidity and excellent esthetic results. In combination also, it is considered as a good therapeutic modality. It can be used for single/multiple recession defects. All techniques have their own merits and demerits and they are often dependent upon many factors like depth, anatomy and supportive factors in the associated gingival recession defect. Hence, a case series has been presented with single/multiple recession defects of patients with esthetic concerns and advanced bone loss. The aim of this presentation is to provide an insight to gingival recession treatment using coronally advanced technique to achieve excellent esthetic outcomes.

Biography

Dr. Bharat Joshi holds Master's degree in Periodontology & Oral Implantology and has been recently 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 (23 Publications). Currently, he is a Editor in Clinical and Medical research journal (Athena Publications), Archives of dental research, Journal of Dental Health & Oral Research and Peer Reviewer with Cureus Medical Journals & Journal of Communication And Health (JCIH). He is former assistant editor with Indian journal of case reports (100 articles contributed as both reviewer and assistant editor) and Assistant editor in 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. As a young dentist, he believes that by gaining experience in both academic and clinical dentistry, there are greater chances of developing good

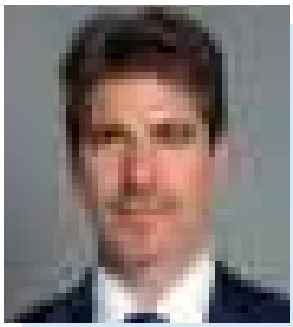
skills & above all, being exposed to diverse and different approaches to diagnostic equipments, there are chances of satisfactory treatment for the patients. He has attended several national and international scientific conferences (recently 10th International dental conference in Italy, 2025 as an eminent speaker), presented his research work as a subject matter expert & has been awarded with best paper. Research Interest: Dr. Bharat Joshi's research Interest includes Implant Dentistry, Soft tissue grafts, Ridge augmentation and endo-perio lesions. In addition, he has knowledge of clinical research in the medical field also. Industry experience: Dr. Bharat Joshi has industrial experience also as a pharmacovigilance scientist (DSA-1) in Parexel. Int.pvt India ltd. For more than 2 years.



Dr. Eduardo Rubio[1] DDS. PhD, Mariano Mombru[2] DDS

[1]Argentinian Catholic University, Argentina

[2]Pontificia Universidad Católica, Argentina



Orthognathic surgery combined with complementary procedures for optimal results

The aim of this conference is to demonstrate that orthognathic surgery is not solely a procedure that independently resolves all problems. While the role of orthodontists in this type of treatment is well known, additional interventions such as dental implants, prostheses, and cosmetic procedures may be necessary to achieve optimal results.

Biography

Dr. Eduardo Rubio graduated as a dentist from the University of Buenos Aires in 1980. He obtained his PhD in 1983 from the same university and completed his residency in Oral and Maxillofacial Surgery in 1994 at Hospital Francés in Buenos Aires, Argentina. He is the Head of Oral and Maxillofacial Surgery at the Dental School of the Argentinian Catholic University and the Head of the postgraduate program in OMFS at the same university.

Dr. C. Mariano Mombrú studied at the Universidad Del Salvador, in Buenos Aires Argentina, and graduated as DDS in 2003. He completed an Oral and Maxillofacial Surgery Program at the Pontificia Universidad Católica Argentina in 2008. He obtained the position of Adjunct Professor at the same University in 2017 and completed two fellowships programs, in USA and China with focus in Reconstructive, Orthognathic and TMJ Surgery. He currently works at the same University and private practice in Buenos Aires, Argentina. Mariano does clinical research in Oral and Maxillofacial Surgery and has published research papers in high impact journals of the specialty.

Charn Thanissorn*, Johnson Ye, Daniel Girgis, Nathan van Dort, Paul V Abbott

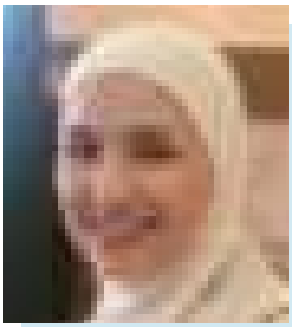
UWA Dental School, University of Western Australia, 17 Monash Ave, Nedlands, Western Australia, 6009, Australia

A comparison of endodontic referrals and treatment in the public and private sectors in Western Australia

The aim was to compare referral patterns and treatment provided by specialist endodontists and endodontic registrars. A retrospective review was conducted of the clinical records of the first 25 patients seen by seven private endodontic clinicians and the equivalent number (175) of patients seen by five public sector endodontic clinicians from 1 January 2017. The average age and range of medical co-morbidities of patients in the public sector were statistically greater. Referred patients and referrers mainly worked in metropolitan Perth. The most frequent reasons for referral in both public and private sectors were to assess and manage non-painful endodontic pathosis, to manage pain, and to manage calcified canals. There was a wide range of cases referred to both sectors but with similar patterns suggesting that the training of specialists adequately prepares them for private practice. The results also indicate that endodontists must be proficient in all aspects of the speciality.

Biography

Charn studied dentistry at the University of Western Australia and subsequently worked as a House Dentist in the Oral and Maxillofacial Surgery department of the Royal Dental Hospital of Melbourne. Charn is currently pursuing further studies and has a keen interest in research.



Enass Shamsy
University of Lincoln, United Kingdom

Pulpotomy of permanent teeth: Are we there yet?

Pulpotomy, traditionally a treatment for primary teeth or immature permanent teeth, has gained attention as a minimally invasive alternative to Root Canal Treatment (RCT) for managing pulpitis in mature permanent teeth. This presentation explores the evolving role of pulpotomy in endodontic practice, focusing on its application in cases of reversible and irreversible pulpitis. We review recent clinical evidence, including randomized controlled trials and systematic reviews, to evaluate the efficacy, success rates, and long-term outcomes of partial and full pulpotomy using contemporary bioactive materials such as Mineral Trioxide Aggregate (MTA), Calcium-Enriched Mixture (CEM), and Hydraulic Calcium Silicate Cements (HCSCs). The discussion addresses challenges in patient selection, diagnostic criteria, and procedural standardization, while highlighting the potential of pulpotomy to preserve pulp vitality, reduce treatment complexity, and improve patient-centred outcomes. By synthesizing current research and expert consensus, this presentation aims to answer whether pulpotomy is ready to redefine endodontic care for permanent teeth or if further evidence is needed to establish it as a standard of care.

Biography

Dr. Enass Shamsy is a dentist and educator with over a decade of experience in clinical practice and academic teaching. She holds a master's degree in Endodontics and Conservative Dentistry and a master's in Medical Education. Dr. Shamsy has a strong background in curriculum development, student mentoring, and interdisciplinary collaboration, with a particular interest in endodontics, preventive dentistry, and public oral health. She has been actively involved in research related to dental education, endodontics materials and practice, and community-based oral health interventions, and has presented her work at national and international conferences. Dr. Shamsy is currently engaged in educational and public health initiatives aimed at improving dental care delivery and patient outcomes.

Dr Fahme Liyakath PK

Restorative and Esthetic Dentistry, Faculty of Dentistry, Cairo University, Cairo, Egypt

Digitally guided, minimally invasive esthetic management of cervical soft tissue deficiencies using pink composite: A non-surgical innovation in the future of dentistry

Background: Gingival recession and the resulting black triangles represent a growing esthetic concern, particularly among aging individuals. Traditional periodontal surgical approaches for papilla reconstruction often produce unpredictable outcomes, especially in cases with interdental bone or papilla loss. This has led to an increasing demand for minimally invasive, highly esthetic alternatives. In modern restorative and esthetic dentistry, non-surgical interventions are gaining prominence as predictable and patient-friendly solutions when surgical reconstruction is contraindicated or unlikely to succeed.

Objective: To demonstrate a conservative and innovative approach using digital tools and pink composite resin for managing multiple gingival recessions and black triangles, aligning with advancements in modern restorative and esthetic dentistry.

Case Description: A 50-year-old male patient presented with generalized Miller's Class I and II gingival recessions and multiple black triangles in the anterior maxilla. Due to the absence of adequate interdental papilla and unsuitability for surgical intervention, a digitally guided, minimally invasive treatment was planned.

Methodology: Digital intraoral scanning and 3D smile simulation were utilized to assess the extent of interdental papilla loss and to visualize the proposed esthetic outcome. This digital workflow enhanced treatment planning and facilitated patient education by providing a realistic preview of post-treatment results, thereby improving patient consent and engagement. A custom shade-matched flowable pink composite resin was selected for its superior handling, adaptability, and ability to replicate the soft tissue's subtle color gradients and contours. The material was applied incrementally using a layered technique, guided by digital references to achieve anatomical accuracy, optimal symmetry, and seamless integration with adjacent tissues. Final finishing and polishing were performed using a multi-step protocol with polishing discs and silicone tips to enhance surface luster, light reflection, and the natural appearance of gingival tissues.

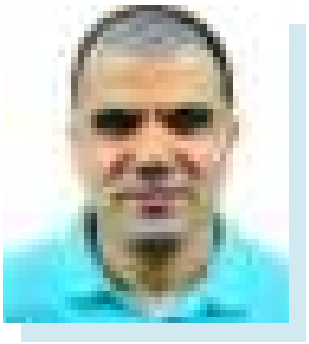
Results: The immediate postoperative outcome showed significant visual improvement in gingival aesthetics and the elimination of black triangles. At 6-week and 3-month reviews, the composite maintained its stability with high patient satisfaction and no inflammation or detachment. (pictures will include in presentation slides)

Future Perspective: This case highlights the innovative integration of digital technology and direct composite artistry as a forward-thinking, patient-centered approach in restorative and aesthetic dentistry. By combining digital workflows with lifelike pink composite materials, this technique offers a minimally invasive alternative for managing soft-tissue aesthetic deficiencies—particularly in cases where surgical intervention is unpredictable or undesirable. As digital tools and materials continue to evolve, this conservative method is well-positioned to become a mainstream solution in aesthetic and restorative dental practice.

Conclusion: Digitally guided pink composite sculpting offers a reliable, minimally invasive solution for managing gingival recessions and black triangles. It reflects the future of restorative dentistry—merging digital precision with aesthetic innovation.

Biography

Dr. Fahme Liyakath PK BDS, MDS–Restorative & Esthetic Dentistry, Cairo University, Egypt. Dr. Fahme Liyakath PK earned her BDS from Kerala University of Health Sciences in 2017(INDIA) and worked as a General Dentist in Kerala, India (2018–2021). She holds certifications in crown preparation, rotary endodontics, aesthetic and biomimetic dentistry, and diplomas in Pediatric Dentistry (CERP ADA UK) and Cosmetic Formulation Technology (German University). Currently a third-year Master's student in Restorative and Esthetic Dentistry, Faculty of Dentistry, Cairo University, Egypt. She is a 4th prize winner at MSA Dental Symbol 2024, Egypt. An oral presenter at IDCO 2024 Egypt, and has a published abstract on AI- enabled analysis of dental diet as a breakthrough in dental health in MSA University Dental journal, Egypt.



Fellahi Samir
University of Algiers, Algeria

Tissue engineering in endodontics: A first step towards a new era

Tissue engineering is an interdisciplinary science that involves the use of biological sciences and engineering to develop tissues that restore, maintain, or enhance tissue function of a tissue or an organ. Initially developed in medicine in the 1980s for skin reconstructions, tissue engineering has extended to odontology and subsequently to endodontics.

Endodontic tissue engineering aims to fully regenerate a new vital tissue ad integrum in an empty and previously disinfected root canal space.

This approach is complex due to the histological and functional specificity of the dentin pulp complex and the relationships that it maintains with its microenvironment. Tissue engineering of dental pulp relates to key stakeholders such as stem cells, bioactive molecules, and scaffolds.

Two techniques are now described in the literature to regenerate the dentin pulp complex. The first approach is to transplant a tissue from tissue engineering or to transplant stem cells associated with/without biomolecules and scaffold. The second called acellular approach lies in the attraction of cells to the site to be regenerated.

Keywords: Tissue Engineering, Root Canal, Dentin Pulp Complex, Stem Cells, Bioactive Molecules, Scaffolds.

Biography

Pr. FELLAHI Samir Endodontist at the Algiers University, he graduated as a dentist in 1999, then he worked in many structures. From 2004 he began his speciality, after that, he obtained his assistant professor rank in 2011. Actually; he is head of department and lecturer at the military hospital in Algeria since 2022.

Deepak S, Gaurav Mishra*, Vinay Kumar Gupta, Sumit Kumar, Nishita Kankane

Department of Public Health Dentistry, Faculty of Dental Sciences, King George's Medical University, Lucknow, India

Prevalence of dental anxiety and effect of school oral health education program on anxiety level among 10 to 15 years old school children in Lucknow, U.P.

Background: Dental Anxiety (DA) is a common, situation-specific form of anxiety that can lead to poor oral health due to avoidance of dental care. Globally, Dental Fear and Anxiety (DFA) affects 5–33% of children, with wide regional variation in India. High levels of DA in children are linked to delayed treatment and uncooperative behaviour, making it a key barrier to effective oral healthcare. Schools offer an ideal setting for preventive interventions, yet limited data exist on DFA prevalence and the impact of school-based oral health programs, especially in Lucknow. This study aims to assess dental anxiety among 10–15-year-old schoolchildren in Lucknow and evaluate the effectiveness of a structured school oral health education program in reducing their anxiety using the Modified Dental Anxiety Scale (MDAS).

Methodology: A prospective interventional study was conducted in five randomly selected schools across different zones of Lucknow, Uttar Pradesh. A total of 500 schoolchildren aged 10–15 years were selected using multi-stage and systematic random sampling. Dental anxiety levels were assessed using the Modified Dental Anxiety Scale (MDAS), administered at baseline, 30 days, and 60 days. A structured oral health education program was delivered during each visit using audiovisual aids and printed materials. Data were collected using a self-structured questionnaire and analysed with SPSS software. Statistical tests included chi-square, paired t-test, with $p<0.05$ considered significant.

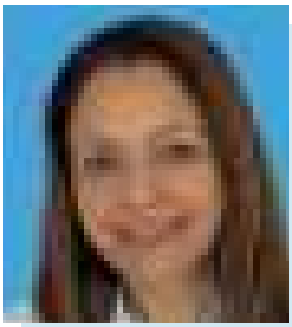
Results: Out of 500 school children surveyed, the majority exhibited moderate (65%) to severe (24.8%) dental anxiety at baseline. Significant associations were observed between dental anxiety and variables such as gender, residency, type of school, and history/nature of previous dental visits ($p<0.001$). Female, urban residents, and private school students reported higher severe anxiety. Children with no prior dental visits or negative experiences showed greater anxiety levels. Following a regular school oral health educational program, low anxiety levels increased from 10.2% to 38%, while severe anxiety decreased from 24.8% to 4% ($p<0.001$), demonstrating a substantial reduction in dental anxiety post-intervention.

Conclusion: The study revealed a high prevalence of dental anxiety among school children aged 10–15 years in Lucknow, with significant associations observed with gender, residency, and prior dental experiences. The structured school-based oral health education program proved effective in significantly reducing dental anxiety levels over time. These findings

highlight the importance of integrating regular oral health education into school curricula as a preventive strategy to improve both dental awareness and emotional readiness for dental care among children.

Biography

Dr. Gaurav Mishra completed his Masters (MDS) in 2011 in the specialty of Public Health Dentistry and currently working as Professor (Jr.Gr.) at Dept. of Public Health Dentistry, Faculty of Dental Sciences, King George's Medical University, Lucknow, Up, India. He has Co-Authored a book titled Dental Health Education: An Integral Part of Dentistry. He has published 3 patent, 1 copyright and more than 61 research articles in national and international reputed journals. He has worked and published extensively related to tobacco control and school oral health programmes along with his routine teaching, training and research activities.



Dr. Gulnar Dara Sethna Associate Professor (Academic)

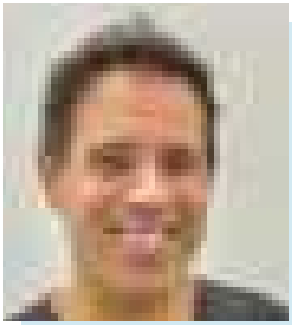
Dept of Periodontology, Government Dental College & Hospital, Mumbai, India

From probing to programming: The AI revolution in periodontology

The emergence of Artificial Intelligence (AI) is redefining the approach to periodontal care, replacing traditional manual techniques with intelligent, data-driven systems. Tools based on machine learning and advanced image processing are enhancing diagnostic accuracy, improving risk prediction, and supporting clinical decisions with greater consistency. From interpreting radiographs to streamlining periodontal assessments, AI is contributing to faster workflows and tailored treatment strategies. This presentation highlights key innovations, real-world applications, and the transformative potential of AI in periodontology. As digital technologies continue to evolve, embracing AI will be essential for delivering precise, predictive, and patient-centered periodontal care in the years ahead.

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.



Gustavo Feser* Od. Ph.D. Esp, Barros A, Funosas E, Antuna MV, Boccio I

Periodontics Division, Faculty of Dentistry, National University of Rosario, Argentina

Non-surgical therapy of periodontal disease. Scope of a new treatment protocol

One of the main etiological agents of periodontal diseases are periodontal bacteria and the response that each individual produces to this infection will depend on genetic factors and those found in the environment that surrounds them. The objectives of periodontal therapies are the elimination of a large number of bacteria and their degradation products to allow the short-term resolution of the established pathology and the control of periodontal infection. The responsibility of microorganisms in the initiation and progression of gingival and periodontal diseases has been demonstrated in several studies. Currently, there are several therapeutic methodologies that can be used individually or in combination to achieve change in the bacterial ecosystem and thus allow resolution of the pathology. The present study evaluated the efficacy of a novel protocol combining non-surgical periodontal therapy with Piezosurgery (woodpecker bone piezosurgery) with systemic administration of specific antibiotics. Clinical and microscopic evaluations were recorded. The treatment protocol demonstrated rapid resolution of the pathology with good stability in subsequent evaluations and rapid recuperation of gingival tissues.

Biography

Gustavo Feser is a dentist and Doctor in Dentistry who graduated from the Faculty of Dentistry at the National University of Rosario (UNR) in 1993. He is a professor in the Chair of Periodontics at UNR and a Category III researcher recognized by the university's Secretary of Science and Technology. He serves on the Examining Board for the undergraduate Periodontics course and the Scientific Committee for the Periodontics Specialist Program, and he teaches in postgraduate orthodontic courses. Dr. Feser is also a lecturer in the Periodontics Residency at UNR. He formerly directed the Department of Periodontics and Implants at the British Sanatorium in Rosario and served as president of the Periodontics and Implants Group of the Argentine Society of Dental Research. He is an external evaluator for SIGEVA CONICET at the University of Buenos Aires, a steering committee member of the Argentine division of the International Association for Dental Research, a referee for research papers, and an active member of the Argentine Society of Periodontology.

Harisha Dewan
Department of Prosthetic Dental Sciences, College of Dentistry, Jazan University, Jazan, Saudi Arabia.

Nanoparticles in Prosthodontics – Revolutionizing Dental Restorations

Introduction: The advent of nanotechnology has ushered in a transformative era for prosthodontics, the dental specialty focused on replacing missing teeth and restoring oral function. Nanoparticles (NPs), typically defined as particles between 1-100 nanometers, exhibit unique physicochemical properties vastly different from their bulk counterparts. This presentation explores the burgeoning integration of NPs into prosthodontic materials and techniques, highlighting their potential to significantly enhance performance, durability, and patient outcomes.

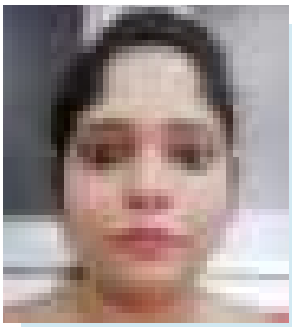
Applications and Advancements: NPs are being strategically incorporated across a wide spectrum of prosthodontic applications. Adding NPs (e.g., SiO_2, Al_2O_3, ZrO_2, TiO_2) to acrylic resins (for dentures) and composite resins (for crowns, bridges) dramatically improves mechanical strength, fracture toughness, flexural strength, and wear resistance. This translates to longer-lasting, more durable restorations. NPs like Silver (Ag), Zinc Oxide (ZnO), and Copper Oxide (CuO) impart potent antimicrobial activity. Incorporated into denture bases, tissue conditioners, cements, and implant coatings, they actively combat biofilm formation (e.g., Candida albicans), reducing the risk of stomatitis, peri-implantitis, and secondary caries – major causes of restoration failure. NPs, particularly TiO_2 and ZrO_2, enhance the optical properties of dental ceramics and composites, allowing for better color matching, superior translucency mimicking natural enamel, and increased polishability, leading to highly esthetic restorations. Hydroxyapatite (HA) NPs and bioactive glass NPs incorporated into coatings for implants or added to bone graft materials promote faster and stronger osseointegration and bone regeneration. NPs can also be functionalized to deliver therapeutic agents (growth factors, antimicrobials) locally. NPs strengthen luting cements, improving their bond strength to tooth structure and restorative materials (e.g., zirconia crowns), while some formulations offer inherent antibacterial properties.

Benefits and Challenges: The integration of NPs offers compelling advantages: superior mechanical performance, enhanced biocompatibility, proactive infection control, improved esthetics, and potential for bioactive functionality. However, challenges remain, including ensuring uniform dispersion within matrices to prevent agglomeration, comprehensively assessing long-term biocompatibility and potential nanotoxicity, managing costs, and establishing standardized manufacturing and clinical application protocols.

Conclusion: Nanoparticles represent a paradigm shift in prosthodontic materials science. Their unique properties enable the development of "smarter," stronger, longer-lasting, and more biologically compatible dental restorations. While ongoing research is crucial to fully optimize safety, efficacy, and clinical translation, the targeted use of NPs holds immense promise for significantly advancing prosthetic dentistry, improving restoration longevity, enhancing patient comfort, and reducing complications. The future of prosthodontics is increasingly nano-engineered, paving the way for next-generation solutions in tooth replacement and oral rehabilitation

Biography

Dr Harisha Dewan is a Prosthodontist, working as an Associate Professor in the College of Dentistry, Jazan University, Saudi Arabia. She did her Master of Dental Surgery in Prosthodontics, including Crown and Bridge from Rajiv Gandhi University of Health Sciences, India. She has over 15 years of teaching experience and has been working as a full-time faculty in College of Dentistry, Jazan University since 2011 and has been teaching in predoctoral curriculum and working in the specialty clinics. She has over 55 international publications to her credit, is a reviewer of numerous journals, and is a member of several dental organisations. She has done several poster and paper presentations in various national and international conferences and conventions, and has attended numerous workshops on implants, maxillofacial prosthesis and cast partial dentures. She has been actively involved in research and is a supervisor for various research projects within the institution.



Dr. Indumathi K. P

Public Health Dentistry, SRM Kattankulathur Dental College and Hospital, SRM Institute of Science and Technology, Kattankulathur, Chengalettu District, Tamil Nadu-603203, India

Plant-based medicine as a tool for minimally invasive, integrative dentistry: Bridging clinical and public health innovations

As dentistry transitions towards a future driven by patient-centered treatment, prevention, and sustainability, plant-based medicine is becoming a significant advancement. Plant-derived therapies, grounded in traditional healing and supported by scientific research, are gaining recognition for their application in minimally invasive dentistry. Their antimicrobial, anti-inflammatory, and tissue-repair properties facilitate preventive strategies and early intervention, thereby minimising the necessity for invasive procedures and conforming to the advanced principles of conservative dental care.

Clinical practice is using botanical medicines as adjuncts to routine care to treat mucosal diseases, gingival inflammation, and early carious lesions. These therapies improve biocompatibility, minimise side effects, and enhance patient acceptance. In public health dentistry, plant-based medicine offers a cost-effective, culturally accepted, and scalable solution, which is particularly important in underserved or resource-limited communities. Their incorporation into community programmes, school health initiatives, and preventive campaigns indicates a transition towards accessible and minimally invasive oral health solutions.

This presentation will examine the role of plant-based medicine in the future of dentistry from both clinical and public health perspectives. This discussion will address contemporary trends, identify evidence gaps, and highlight innovations necessary for the standardisation, regulation, and safe integration of these therapies in mainstream practice. The session will highlight the importance of interdisciplinary collaboration in promoting plant-based medicine as a vital element of sustainable and minimally invasive dental care, addressing the needs of contemporary populations and global health issues.

Biography

Indumathi K. P has a strong foundation in clinical dentistry and public health, she brings comprehensive experience aligned with the responsibilities of a Dental Assistant Surgeon. She is Currently pursuing a Ph.D. in Public Health Dentistry, and also holds an M.D.S. in the same field, supported by a Fellowship in Implantology and an international observership in the UK. She has served as an Assistant Professor at SRM Dental College, while also providing dental care as a consultant across clinics and NGOs. Her continuous learning includes certifications in Tobacco Deaddiction, Basic Life Support, and advanced statistical tools. Indumathi has been actively involved in institutional quality committees like NIRF and IQAC, she ensures high standards in dental education. Recognized with awards for research and outreach, she is committed to delivering community-based oral healthcare with excellence and compassion.

Dr. Isaac Chan

Specialty Dentist Oral Surgery, Bristol Dental Hospital, United Kingdom

Introduction of a 'one-stop' oral surgery clinic: A pilot study

This pilot study evaluates the implementation of a 'one-stop' oral surgery clinic aimed at improving patient care and operational efficiency. The initiative sought to reduce time to treatment, enhance patient access, streamline clinician workflow, improve financial efficiency, and minimize paper waste. Additionally, the study assessed the clinic's suitability for managing Tier 2 oral surgery cases and urgent soft tissue biopsies.

Methods: Patients meeting the inclusion criteria (Tier 1 and routine Tier 2 oral surgery, routine soft tissue biopsy, ASA I–II, and suitable radiographs) were triaged. Exclusion criteria included ASA ≥III, complex medical/social histories, significant anxiety, or unsuitable imaging. Of 425 patients triaged, 51 (12%) were eligible for telephone triage; 30 were subsequently assessed in the 'one-stop' clinic. Post-treatment feedback was obtained from 43 patients.

Results: Among the 51 triaged patients, 30 were deemed suitable for 'one-stop' care. Of these, 95% reported reduced time to treatment and travel, and expressed high satisfaction, with most indicating they would recommend the model. All received digital patient information leaflets. Ineligible cases were primarily excluded due to complex health or social factors.

Conclusions: The 'one-stop' oral surgery clinic demonstrated significant benefits, including reduced waiting times and high patient satisfaction. Based on these findings, the model will be permanently integrated into the Oral Surgery service at Bristol Dental Hospital.

Biography

Isaac Chan graduated in 2020 from the University of Bristol. Since graduating, Isaac completed two dental core training years in OMFS and Oral Medicine. This was followed by a year as a Teaching Fellow in OMFS. In his current role he works as a Specialty Doctor and Clinical Lecturer at Bristol Dental Hospital and Bristol Dental School respectively. He also works as a general associate dentist.

Jamal Hassan Assaf[1*], Mauricio Mezzomo[2]

[1]Department of Stomatology, School of Dentistry, Federal University of Santa Maria, Brazil

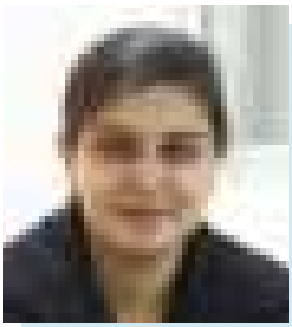
[2]Dentistry Course, Franciscan University of Santa Maria, Brazil

Orthodontic extrusion and vertical alveolar ridge augmentation: A case report step by step

The alveolar ridge undergoes a significant remodeling process following tooth removal. These hard and soft tissue change may affect the outcome of treatment with implants, either by limiting the bone volume needed for anchorage of the implant or by compromising the esthetic result regarding the appearance of the soft tissue at the final implant-supported reconstruction. The decision regarding the optimal bone augmentation protocol for the regeneration these defects is primarily based on the defect morphology. Based on this, a classification of bone defects has been developed, aiming to simplify the decision- making process regarding choice of the strategy for bone augmentation. The class 5 defects are characterized by reduced ridge height. Vertical ridge augmentation is indicated in situations in which the remaining amount of vertical bone is insufficient for anchorage of the implant or in which an unfavorable appearance of the soft tissue is expected owing to the lack of hard-tissue support. These defects are most challenging to treat because the rate of soft-tissue complications appears to be considerably higher for vertical ridge augmentations than for horizontal augmentations. This may be because a tension-free primary wound closure is more difficult to achieve as a result of the increased volume to be covered. The case report is an alternative technique for treat these defects. The defect was very significant in the anterior region of the maxila and the prognosis of the surgery was uncertain, for this reason the orthodontic extrusion was the treatment of choice to achieve vertical height of the alveolar ridge. A vertical ridge regeneration was obtained and esthetic result was successful.

Biography

Dr. Jamal Hassan Assaf is an Associate Professor of the Federal University of Santa Maria, Brazil. He received his PhD degree in 2012 at São Leopoldo Mandic Institute and Dental Research Center, Campinas, Brazil. He dedicates himself primarily to the Private Practice. His research is clinical focused on regeneration and immediate implants in esthetic zone.



Dr. Kanika Gupta Verma

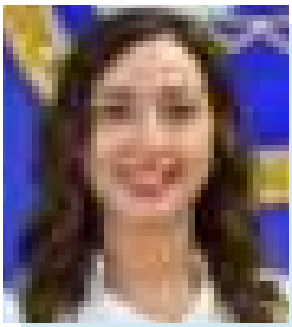
Professor, Department of Pediatric and Preventive Dentistry, Teerthankar Mahaveer University, Moradabad, Uttar Pradesh, India

Decoding pediatric oral lesions

Neonates' oral lesions might indicate a variety of illnesses, which frequently cause parents to worry and feel anxious. A timely diagnosis and early assessment can help with wise care and provide a baseline for how the illness will develop in the future. Despite being a crucial area of the pediatric specialty, many intraoral anomalies go untreated or are even misdiagnosed due to a lack of reporting, a lack of awareness, and a lack of skill. A significant portion of these oral disorders show up as oral characteristics in newborns, which frequently causes parents to feel anxious and uneasy. Even though the lesions are typically limited to the oral cavity, they may offer some hints about the more significant systemic problems that are underlying. A wide range of conditions, most of which are benign and asymptomatic, present with oral symptoms in newborns and typically go away on their own without treatment. A correct diagnosis based on comprehensive clinical, histological, and radiographic tests is necessary for prompt therapy of such lesions. However, accurate diagnosis, treatment, and parental counseling require a comprehensive clinical examination and awareness of the different lesions.

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 15 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; Indian Dental Association and Indo-Pacific Academy of Forensic Odontology. She has around 69 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.



Karina Dobreva[1*], Hristina Arnautska[2]

[1]Student, Faculty of Dental Medicine, Medical University of Varna, Varna, Bulgaria

[2]Professor, Department of Orthodontics, Faculty of Dental Medicine, Medical University of Varna, Varna, Bulgaria

Appliance selection in rapid palatal expansion: A maturation-based overview

Introduction: Transverse maxillary deficiency is a common orthodontic problem associated with posterior crossbite, crowding, and narrow nasal airways. Rapid Palatal Expansion (RPE) is a well-established orthopaedic method to correct maxillary constriction. However, the success of expansion critically depends on the maturation stage of the midpalatal suture. Advances in imaging and appliance design have led to diversified RPE modalities suited for different age groups and skeletal conditions.

Purpose: To present a structured overview of current RPE appliances adapted to the ossification stage of the midpalatal suture, and to guide clinical decision-making through comparative analysis of conventional RPE, 3D-printed designs, MARPE, and SARPE.

Materials and Methods: The data presented are synthesized from an extensive review of contemporary scientific literature, CBCT-based classifications of suture maturation, and recent clinical trials comparing RPE outcomes. A clinical algorithm is proposed based on age, skeletal maturity, and imaging. Clinical cases are included to illustrate key principles.

Results: Selection of RPE modality must reflect midpalatal suture maturity, skeletal architecture, and periodontal capacity. A stratified framework supports biologically consonant planning:

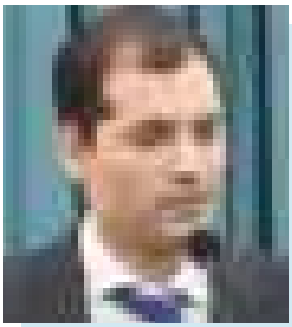
- Children with open sutures predictably respond to tooth-borne expanders (Hyrax, Haas), achieving orthopedic correction during early and mixed dentition.
- Adolescents at or post pubertal peak are best suited for MARPE, where hybrid anchorage secures controlled skeletal expansion in partially ossified sutures with reduced dentoalveolar burden.
- Young adults up to 35, particularly with limited posterior anchorage or periodontal compromise, require Bone-Anchored Maxillary Expanders (BAME) for fully skeletal load transfer.
- Adults with complete suture fusion necessitate SARPE to achieve transverse correction in mature skeletal states.

Across all stages, digitally designed, 3D-printed expanders optimize appliance geometry, vector control, and individual fit. Additive manufacturing enhances procedural efficiency, improves patient tolerance, and supports integration within interdisciplinary workflows.

Conclusion: Rapid palatal expansion is no longer a singular mechanical event but a maturationally guided orthopedic strategy. CBCT-assisted staging and biomechanical reasoning empower clinicians to replace generalized protocols with predictive, individualized intervention. The transition from tooth-borne systems to skeletally anchored, digitally optimized protocols–supported by 3D printing, algorithmic modality selection, and interdisciplinary planning–marks a paradigm shift in managing transverse discrepancies. A biologically consonant, digitally empowered framework now underpins the modern RPE landscape: adaptive, evidence-driven, and clinically resilient.

Biography

Karina Dobreva is a fifth-year dental student at the Faculty of Dental Medicine, Medical University-Varna, Bulgaria, with a strong interest in orthodontics and dentofacial orthopaedics. Vice President of ADMS-Varna and the Dental Medicine Organizing Committee (BSYSB, 2025). Main organizer of the first Student Dental Forum STUDENT VARNA in Varna (2024, 2025). Active participant in international orthodontic sessions: 29th BaSS Congress (Belgrade, 2025), BSYSB (Bulgaria, 2024): Session Winner. Completed numerous certified theoretical and practical orthodontic courses. Actively engaged in clinical practice and scientific publications under the guidance of specialists. Member of the Student Council, EDSA, and the Alexander Study Club, Bulgaria.



Kaplan Danill Borisovich

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

Department of medical reseacrh, Kh. Ibragimov Complex Institute of the Russian Academy of Sciences, Grozny, Russia

Improving orthodontic diagnosis and treatment through digital analysis of dentition position relative to the LP coordinate parameter

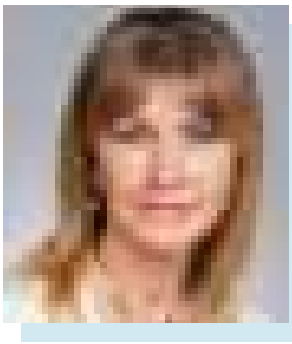
Anomalies in tooth position, occlusion, and jaw alignment affect over 70% of children and 30% of adults, impacting facial aesthetics and dental function. Traditional diagnostic methods—clinical examination, cephalometry, anthropometry, and radiography—are now supplemented by digital technologies, which streamline data collection and enhance facial aesthetics analysis. However, gaps remain in understanding age-related changes and the relationship between jawbone abnormalities and soft tissue dynamics. This study introduces a novel diagnostic approach using the LP coordinate parameter, derived from the intersection of the N-Po line (a stable anthropometric reference) and the occlusal line, to assess dentition position in three dimensions.

The research aims to:

1. Develop a method for evaluating tooth, dentition, and occlusion position relative to the LP parameter.
2. Create a digital program for simultaneous analysis of upper and lower dentition using LP, including apical base assessment.
3. Establish normative angular, linear, and index values for facial aesthetics via computer analysis. Volunteers with normal occlusion were scanned to generate STL models, with anthropometric points marking transversal/sagittal dentition parameters. Key findings include correlations between tooth size and dentition width/length, and the distal displacement of dentition relative to LP with larger teeth. The proposed digital tool automates positioning via palatal fold landmarks, enabling standardized analysis. This innovation promises to enhance diagnostic precision and personalized treatment planning for distal occlusion cases.

Biography

Dr. Daniil Kaplan studied dentistry at the Moscow State Medical and Dental University named after A.I. Evdokimov (now the Russian University of Medicine), graduating in 2020. He then completed his residency in Orthodontics (2022) and earned a PhD in Medical Sciences. Since 2022, he has worked as an Assistant Professor at the Department of Orthodontics, Russian University of Medicine, combining teaching, research, and clinical practice. In 2024, he authored A Practical Guide to the Specialty of Orthodontics, officially recommended by the Russian Ministry of Education and Science. Currently, Dr. Kaplan is pursuing a doctoral dissertation (since 2024) and holds a position as Senior Researcher at the KNII of the Russian Academy of Sciences, Chechen Republic (since 2025). His work focuses on digital orthodontic diagnostics and 3D treatment planning.



Larisa P. Gerasimova[1*], Novikov Yuri O[2], Akopyan Anait P[3]

[1]Department of Therapeutic Dentistry, Faculty of Dentistry, Bashkir State Medical University, Ufa, RF

[2]Department of Neurosurgery and Medical Rehabilitation, Bashkir State Medical University, Ufa, RF

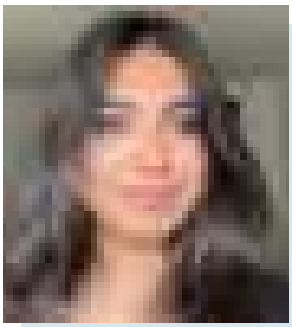
[3]Department of Neurology, Institute of Continuing Professional Education, Bashkir te Medical University, Ufa, RF

Interdisciplinary approach to studying the etiology of bruxism. Diagnostics and treatment

The report will discuss the difficulties of diagnosing orofacial pain as one of the most complex problems of modern medicine. The views of neurologists, osteopaths, psychotherapists on the occurrence of prosopalgia are presented. As well as the relationship of bruxism with myofascial pain syndrome of the face. The views of Simmons and Travel (1980) are presented, who proved that the decisive factor in the mechanisms of occurrence of this type of prosopalgia is the dysfunction of the masticatory muscles. The mechanism of development of painful dysfunctional syndrome of the face as a complication of prolonged tension of the masticatory muscles, without their subsequent relaxation, is given. The views of Thomas Myers on the relationship of emotions with the muscular-fascial system are highlighted. The causes, clinical and radiological features of dysfunction of the temporomandibular joint and bruxism are given. The issues of modern diagnostics and treatment of bruxism and dysfunction of the temporomandibular joint are covered from the point of view of neurologists, osteopaths and dentists.

Biography

Doctor Larisa Gerasimova after graduating from the Bashkir State Medical Institute in 1982 worked for 17 years at the Republican Children's Clinical Hospital. During her work at the hospital, she defended her candidate's dissertation in 1991 and her doctoral dissertation in 1997. From 2003 to the present day, she has been the head of the department of therapeutic dentistry at the Bashkir State Medical University. Larisa Gerasimova is the author of more than 800 scientific papers. She has 75 invention certificates and patents. She is the author of 33 scientific monographs. In 2025, under her editorship, the monograph Orofacial pain: an interdisciplinary approach was published by Goetar Publishing House, Moscow.



Lovinya Gaware

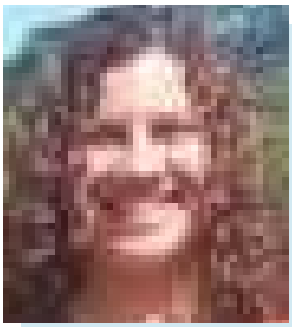
Barts and The London, Queen Mary University of London, London, England

Healing in a new light: Red light therapy in postoperative dental care

Red Light Therapy (RLT), also known as photobiomodulation, is gaining increasing attention as a non-invasive adjunct to enhance postoperative healing and reduce discomfort following common dental procedures. With a growing demand for faster, less invasive recovery, especially in the facial aesthetics field, RLT is emerging as a promising tool to improve both clinical and patient-centered outcomes. Its potential lies in its ability to accelerate healing, minimize visible swelling, and reduce the need for pharmacological intervention such as analgesics or anti-inflammatories. This review explores the evolving role of RLT in dental practice, focusing on its application after a range of invasive procedures including extractions, implant placement, periodontal surgeries, and pulpectomies. Red light, typically delivered in the 600–1000 nm wavelength range, has been found to stimulate mitochondrial activity, enhance ATP synthesis, reduce pro-inflammatory cytokines, and accelerate tissue regeneration, without causing thermal damage to surrounding tissues. Drawing on recent clinical evidence, this review assesses the effectiveness of RLT in improving overall patient recovery. Additionally, key challenges such as variability in treatment protocols (wavelength, dosage, and timing), limited standardization, and a lack of long-term outcome data are examined. Notably, the consistent absence of adverse effects across studies supports its safety profile. This review evaluates whether RLT can be integrated into routine dental care, its potential future applications and outlines areas where further research is needed to establish clinical guidelines and optimize outcomes.

Biography

Lovinya Gaware is a BSc Dental Hygiene and Therapy student at Queen Mary University of London, expected to graduate in June 2026. She is currently the student course representative for the DHT program, actively contributing to student engagement and academic representation.



Micheline Coelho Ramalho Vasconcelos*, Dr. Rui Pereira

CADEFI, Instituto de Medicina Integral Prof. Fernando Figueira/Recife, Pernambuco, Brazil

Multidisciplinary treatment of cleft lip and palate: Experience of the IMIP center for treatment of craniofacial abnormalities in recife, Northeast region of Brazil

Cleft Lip and Palate (CLP) are among the most common congenital craniofacial anomalies worldwide, with significant functional, aesthetic, and psychosocial implications. The IMIP Center for the Care of Facial Defects is a reference center in Brazil for the diagnosis and management of these conditions and the treatment is 100% funded by the brazilian health system, health institution.

Objective: To describe the epidemiology, clinical approach, and multidisciplinary management protocols for patients with CLP at CADEFI.

Methods: This descriptive report summarizes institutional data and outlines the comprehensive care model implemented at CADEFI, integrating surgical, dental, speech, and psychosocial interventions.

Results: Since its accreditation by the Brazilian Ministry of Health in 2002 for high-complexity procedures, CADEFI has registered over 9,571 patients with CLP and other craniofacial anomalies. The center's multidisciplinary team provides care starting with prenatal diagnosis and continuing through staged interventions, including primary cheiloplasty at approximately 6 months and palatoplasty between 9–12 months of age, followed by long-term rehabilitation. Epidemiological data indicate a global CLP prevalence of approximately 1:600 live births, with regional variations. In Brazil, estimates range from 0.43 per 1,000 live births to 2,900–4,400 new cases annually.

Conclusion: The CADEFI model demonstrates the importance of coordinated multidisciplinary care in improving surgical, functional, and psychosocial outcomes for individuals with CLP, ultimately promoting social inclusion.

Keywords: Cleft Lip, Cleft Palate, Craniofacial Abnormalities, Multidisciplinary Care, Plastic Surgery, Brazil.

Biography

Dr. Micheline studied Speech and Language Pathology at The Federal University of Pernambuco, Brazil and graduated as MS in 2006. She coordinates the Speech and Language Pathology Service at CADEFI and participates in the epidemiological, clinical, surgical, and genetic studies of craniofacial malformations research group at Instituto de Medicina Integral Prof. Fernando Figueira. She received her PhD degree in 2022 at the same institution.

Mohamed Azhari[1*], Oussama Bentahar[2]

[1]Assistant Professor in Maxillofacial Prosthodontics, FMPDF, USMBA, FEZ

[2]Professor in Maxillofacial Prosthodontics, FMPDF, USMBA, FEZ

Prosthetic rehabilitation of facial substance loss: A clinical and technical approach developed by the maxillofacial prosthodontics team of the faculty of medicine, pharmacy, and sentistry at Sidi Mohamed Ben Abdellah University of Fez

This clinical work was carried out by the Maxillofacial Prosthodontics team at the Faculty of Dentistry of Fez (FMPDF) and focuses on the prosthetic management of complex facial substance losses of oncological or traumatic origin. It presents a case series illustrating the application of an original and standardized protocol, developed locally, for the fabrication of facial silicone prostheses (jugular, orbito-palpebral, nasal, and auricular). The goal of this rehabilitation is to restore both the anatomical and aesthetic integrity of the face while improving patients' physical, social, and psychological quality of life. Each case is approached through a structured five-step protocol: impression, wax-up, molding, silicone casting, and finishing, with technical adaptations specific to each anatomical site. The protocol is then compared with the international literature to highlight its contributions, originality, and future development perspectives.

Biography

Mohamed Azhari Professor at the Faculty of Dentistry of Rabat (FMDR), the Faculty of Medicine, Pharmacy, and Dentistry of Fes (FMPDF), and at the International University of Rabat (UIR).

Monika Ośko

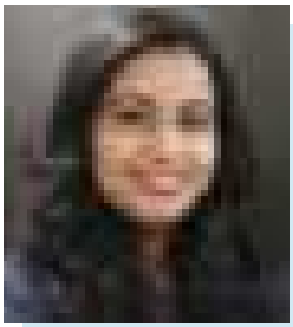
Barcelona Orthodontic World Institute Country, Spain

MFS philosophy and MRT technique: A causal and structural approach to orofacial growth and tongue mobility

This presentation introduces the MFS (Myofunctional Stimulation) philosophy as a causal, preventive, and interdisciplinary approach to orofacial and craniofacial development. Emphasizing its global reach and clinical relevance, the session presents MFS as a therapeutic framework integrating orthodontics, myofunctional therapy, and structural bodywork providing intervention at the causal level rather than treating the manifestations alone. The first part explores how MFS supports harmonious craniofacial growth through the normalization of oral functions such as breathing, swallowing, and mastication. Real-world clinical cases illustrate the practical application of myofunctional stimulators and highlight the value of interdisciplinary collaboration between orthodontists, speech therapists, physiotherapists, and osteopaths. Building on this foundation, the second part of the presentation focuses on tongue mobility as a critical but often overlooked component of orofacial balance. It introduces the proprietary Myofascial Release Technique (MRT), developed to improve tongue mobility both in pre- and post-frenulotomy cases. Drawing from research in topographic anatomy and fascial biomechanics, this segment offers a structural analysis of the oral floor and lingual frenulum, demonstrating how fascial tension and muscular restrictions impact oral function. The session will also include the presentation of selected clinical cases.

Biography

Monika Osko is a dentist and MFS ambassador, currently pursuing her doctoral studies at the University of Barcelona. She is the President of the Polish Society of Myofunctional Therapy and co-author of the book Orthodontic Treatment According to the MFS Philosophy, enriched with 10 original chapters written by her. She has authored five articles published in Forum Ortodontyczne, Ortodoncja w Praktyce, and the Online Journal of Oral and Dental Health. The book is currently being translated into English. Monika is also a co-author of three children's books from the ‘Doctor Dotsie’s Little Tales’ series, dedicated to promoting healthy habits in children. The stories focus on the importance of proper breathing, chewing, and oral functions for the health and harmonious development of the orofacial area and craniofacial structures.



Dr. Monika Sunil Jadhav
Goregaon Dental Centre, Mumbai, Maharashtra, India

Photobiomodulation in prosthodontics: A new frontier

Photobiomodulation (PBM), formerly known as Low-Level Laser Therapy (LLLT), has emerged as a promising non-invasive therapeutic modality that uses low-power light energy to stimulate cellular activity, modulate inflammation, and enhance tissue regeneration. In the realm of prosthodontics and implantology, soft tissue healing is a critical factor influencing the long-term success of prostheses and dental implants. Delayed or inadequate healing can lead to complications such as peri-implantitis, tissue recession, or prosthesis failure.

This presentation explores the biological mechanisms through which PBM enhances soft tissue healing, including the stimulation of mitochondrial activity, increased ATP production, angiogenesis, and modulation of cytokine levels. Current evidence demonstrates its efficacy in accelerating wound closure, reducing postoperative inflammation, and improving the quality of peri-implant mucosa. Clinical protocols involving red and near-infrared wavelengths (typically 600–1000 nm) are discussed with regard to dosage, frequency, and delivery techniques.

Additionally, this session examines recent clinical trials and in-vitro studies that highlight the benefits of PBM in various prosthodontic and implant cases—ranging from immediate implant placement to peri-implantitis management. Limitations, contraindications, and standardization challenges in PBM application are also addressed to ensure safe and predictable outcomes.

As dental medicine moves toward biologically driven therapies, PBM presents a valuable adjunct to conventional treatment protocols, offering a painless, drug-free, and cost-effective approach to enhancing peri-prosthetic and peri-implant soft tissue health. The integration of light-based therapy into routine practice holds great potential for improving patient outcomes and satisfaction.

Biography

Dr. Monika Sunil Jadhav is a dedicated Maxillofacial Prosthodontist with a strong academic and clinical foundation. She completed her undergraduate dental education at MGM Dental College, Mumbai, and pursued postgraduate specialization in Maxillofacial Prosthodontics from MGV Dental College and Hospital. Throughout her academic journey, Dr. Jadhav has demonstrated consistent excellence, earning recognition for paper presentations at both state and national conferences, along with contributing to several peer-reviewed publications. Her clinical expertise lies in the comprehensive rehabilitation of patients with facial deformities, congenital anomalies, and post-surgical defects—restoring not only function and aesthetics but also emotional well-being. Driven by a passion for innovation, her current clinical focus centers on the application of Photobiomodulation in Soft Tissue Healing Around Prostheses, exploring light-based therapies to enhance peri-prosthetic tissue regeneration.

A strong advocate of patient-centered care, Dr. Jadhav integrates advanced technology with compassionate treatment to improve quality of life and instill renewed confidence in her patients. She continues to contribute to the field through research, academic involvement, and evidence-based clinical practice.

Michelle Wodke[1], Munisha Mangal[1*], Alyson Axe[1], Billy Franks[2], Kate Fabrikant[3]

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[2]Clinical Research & Development, Haleon, Weybridge, Surrey, United Kingdom

[3]Regulatory Affairs, Haleon, Weybridge, Surrey, United Kingdom

Addressing barriers and disparities in preventative oral health care: Insights into dentist-patient dynamics in the UK

Preventative Oral Health Care (POHC) is integral to overall well-being, yet challenges persist in aligning Oral Health Professionals (OHPs) with patient compliance. This study aims to identify and address barriers stalling effective preventative measures implementation by examining perspectives from consumers and OHPs. Insights can inform strategies to enhance public oral health outcomes through increased awareness and proactive interventions.

Research surveys were used to collect UK-wide data on oral health habits and the role of preventative advice in routine dental visits. Two surveys were conducted, one involving 505 OHPs and 2,000 consumers, and the second involving 1,004 parents and their children. Data collection aimed to capture a broad and representative understanding of the current state of preventative oral health care.

Findings revealed differing attitudes to POHC in patients by gender, a misalignment of expectations between patients and OHPs, and regional differences possibly linked to NHS and private care provision. These barriers highlight the complexity of delivering consistent and effective POHC across different demographics and regions, emphasizing the need for community dentistry to address larger populations by promoting oral hygiene practices and organizing outreach programs.

This research emphasizes the need to involve both patients and oral health professionals to improve POHC and address regional, gender, and societal disparities for better public health outcomes in oral health. There is an opportunity for the oral health industry to address some of the identified barriers through tailored educational campaigns and training programs, ensuring that all OHPs are better informed and supported. Together, these efforts could build a foundation for improved quality of life and lifelong oral health in the UK.

Biography

Dr Munisha Mangal has a Doctorate in Biomaterial Science, an MSc in Public Health (King's College London), and a Bachelor of Dental Surgery. She is working as a Medical & Scientific Affairs Principal Scientist at Haleon (previously GSK CH). Dr Munisha holds a keen interest in preventive oral health interventions and public health initiatives.

Nafisa Shah[1*], Akshi Shah[2], Basmal Ria[3]

[1,2]Oral and Maxillofacial Surgery, Luton and Dunstable University Hospital, Luton, Bedfordshire, UK

[3]Oral and Maxillofacial Surgery, Lister Hospital, Stevenage, Hertfordshire, UK

A case of Gardner's syndrome involving a multidisciplinary approach

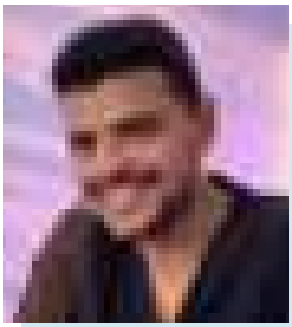
Background: Gardner's syndrome; a rare autosomal dominant disorder, is a subset of Familial Adenomatous Polyposis (FAP) associated with both intestinal and extra-intestinal manifestations, including dental anomalies. Mutations in the APC tumour suppressor gene underlie the condition, which has a prevalence of 1 in 8,000 to 14,000, with a slight female predilection. Patients develop numerous intestinal polyps with high malignancy risks, often preceded by oral and craniofacial symptoms such as maxillofacial osteomas, odontomes, unerupted teeth and delayed dental development.

Patient Information: A 16-year-old female with FAP and well-controlled asthma presented at the Lister Hospital Oral and Maxillofacial Department for evaluation of her malocclusion.

Management & Outcome: The patient was seen on a joint oral surgery-orthodontic clinic and a multidisciplinary approach was taken. Radiographic imaging, including OPG and CT scans of the maxilla and mandible revealed several odontomes and impacted teeth which required surgical intervention. Planned surgical management involved extractions of the UR5, UL5, unerupted LR8 and LL8 teeth, impacted and unerupted LR2, ULC, LLC, D, E, LRB, C. Multiple odontomes were surgically removed in all quadrants along with placement of Advanced Platelet Rich Fibrin (APRF) under general anaesthesia. The procedure involved raising various mucoperiosteal flaps as well as extraction of a LR2 in close proximity to the lower border of the mandible, located bucco-lingual & horizontally displaced with a lingual root containing an apical hook. Post-surgical review indicated satisfactory healing and planned orthodontic treatment to align the dentition.

Biography

Dr. Shah studied Biomedicine at the University of East Anglia followed by Dentistry at Peninsula Dental School. She completed her practice training by 2013, which is when she started her dental core training in secondary care. Following on from her professional qualifications, she started to develop a passion for academia and started a teaching programme within the department, particularly for dental core trainees. The organisation of which, in time has demonstrated the importance of multidisciplinary approaches for certain cases and having the space for such cases with the appropriate specialties fully available in order to provide the care required.



Dr. Naval Ghule

Goregaon Dental Centre, Mumbai, Maharashtra, India

Combating the vape wave: Community-based tobacco cessation and awareness efforts in urban India

Tackling Tobacco Addiction: A Gateway to Oral Health and Cancer Prevention in India. How India does it!

India 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.

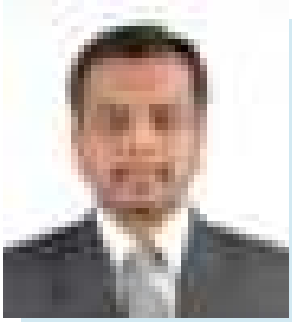
Through a public health lens, I will discuss the challenges of implementing cessation programs, particularly in underserved populations, and the role of awareness campaigns in reducing tobacco consumption. By drawing connections between tobacco use and oral cancer, I will stress the importance of integrated 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 combat tobacco addiction and its impact on oral health. His work empowers individuals and communities toward healthier, smoke-free lives.



Prof (Dr). Ramesh Nagarajappa

Department of Public Health Dentistry, The Oxford Dental College, Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka, India

Association of binge watching on sleeping pattern of undergraduate dental students in Bangalore, India

Background: Binge-watching is a recent phenomenon that has attracted attention because many people around the world have begun watching a lot of movies and web series on Over the Top (OTT) platforms. By definition, binge watching is watching 3 to 6 episodes continuously without any breaks, without any feeling of guilt associated with it. Binge-watching can lead to a sedentary lifestyle and create problems in personal relationships, causing people to procrastinate important things in their professional/work life, reduce sleep time, insomnia, and gain weight.

Methodology: This is a cross-sectional study with a simple random sampling of 391 dental college students in Bangalore. A semi-structured questionnaire and Pittsburgh Sleep Quality Index (PSQI) scale were used for data collection. Chi square test was used for statistical analysis.

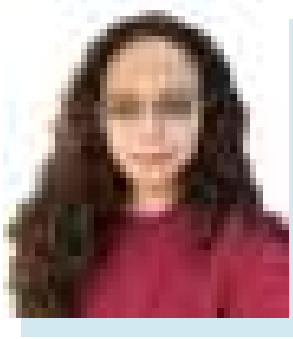
Results: The prevalence of binge watching was 63.3% among OTT users. There was a statistically significant association between binge-watching and the various PQSI Scale components, including subjective sleep quality, sleep latency, habitual sleep efficiency, and daytime dysfunction.

Conclusions: The majority of people who binge watch television are unaware that doing so can have long-term effects on their quality of life and sleep. Before going to sleep, practices like meditation and relaxation techniques can be followed to prevent cognitive arousal.

Keywords: Binge Watching, Dentists, Sleep Quality, Students.

Biography

Prof (Dr). Ramesh Nagarajappa, graduated from the prestigious Bapuji Dental College and Hospital, Davangere, India in 1999. He is presently working as a Professor and Head, in the Department of Public Health Dentistry affiliated to The Oxford Dental College, Bangalore in India. He has a post-graduation teaching experience of over 25 years and guiding both PhD and MDS students. He has also authored 158 publications in various international and national reputed journals. Been a regular reviewer too in many journals. He also has experience of delivering scientific presentations and chairing scientific sessions in various conferences.



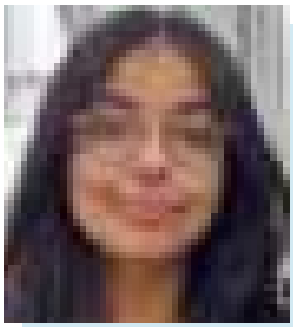
Richa Gupta
Independent Medical Writer, United States

Shaping the future of precision dentistry: Integrating real-time navigation systems for enhanced clinical outcomes

The future of dentistry is undoubtedly digital and robotic, driving a transformative shift toward a more advanced, patient-centric approach to oral health. Among these innovations, real-time navigation systems are emerging as pivotal tools that enable highly accurate, computer-assisted execution of complex procedures. By integrating preoperative imaging—such as cone-beam computed tomography and intraoral scanning—with optical or electromagnetic tracking technologies, these systems provide continuous, three-dimensional guidance of instruments relative to patient anatomy. In implantology, dynamic navigation enhances precision in osteotomy preparation and implant placement, often surpassing the accuracy of static surgical guides while offering greater intraoperative flexibility. Endodontic procedures benefit from improved canal location and negotiation of complex anatomies with minimal dentin removal. Maxillofacial and reconstructive surgeries leverage these technologies to achieve safer, more predictable outcomes. Coupled with advancements in robotic-assisted workflows, artificial intelligence, augmented reality, and digital treatment planning, real-time navigation systems are redefining the standards of care across dental disciplines. Despite challenges related to costs, training, and integration into existing workflows, these technologies promise to support minimally invasive techniques, reduce procedural errors, and enhance patient satisfaction. As digital and robotic solutions continue to evolve, they will play a central role in shaping a new era of precision dentistry focused on efficiency, safety, and high-quality patient outcomes.

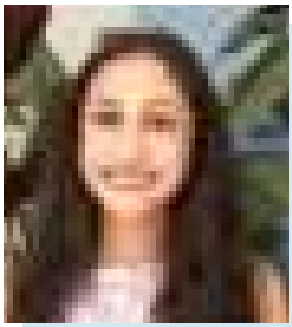
Biography

Dr. Richa Gupta holds a Bachelor's degree in Dental Surgery from MJP Rohilkhand University, Bareilly, India, and has pursued advanced training in Hospital Management at the National Institute of Health and Family Welfare, New Delhi. She is certified in scientific writing by Stanford University, USA, and has completed comprehensive editorial training. With 12 years of experience in dentistry, Dr. Gupta is an accomplished medical writer recognized for producing high-quality content for national and international journals and leading dental magazines. She has strong expertise in analyzing complex clinical literature and guidelines to develop impactful research publications. To date, she has authored over 13 articles and contributed more than 50 blogs, chapters, and feature articles, actively supporting the advancement of dental practice and technology through her writing endeavors.



Rida Arain*, Ishmyne Bhamra*, Jaisy Joseph, Omobolagi Adenuga, Trina Ukaj

Division of Dentistry, Faculty of Biology, Medicine and Health, University of Manchester, United Kingdom



Bridging gaps in oral medicine education: A multiracial visual atlas

An atlas-style approach to the teaching and learning of oral medicine offers a powerful tool to improve visual diagnostic skills, particularly in recognising clinical presentations across diverse patient populations. Oral medicine resources often lack adequate representation of how conditions manifest across different skin tones, particularly in darker and more pigmented oral mucosa. This gap can lead to diagnostic challenges, creating substantial barriers for students and clinicians in delivering equitable and effective care.

The objective of this project is to explore the development and educational application of a first-of-its-kind oral medicine atlas, designed to enhance the recognition and accurate diagnosis of oral conditions across a diverse range of skin tones.

Patients were screened from the electronic records at the Oral Medicine Department at the University of Manchester Dental Hospital by students, educators and dental professionals. All patients selected had provided consent for photographs to be used for medical teaching. Data collected included only photographs and oral medicine diagnoses; no personal data or any other identifying information were used. Cases were organised based on the Massey-Martin scale. For each oral medicine condition, an informative description was written to include incidence, risk factors, signs and symptoms, and treatment/management.

The future of dentistry is being shaped by the rise of open-access digital education. Our user-friendly resource is designed to actively support clinical education and integrates seamlessly into both undergraduate and postgraduate curricula. It enhances students' visual diagnostic skills, enabling them to recognise conditions across all skin tones and patient presentations, thus, boosting diagnostic confidence and preparing future dentists to deliver equitable, culturally competent care. Preliminary feedback from students suggests the value of features such as a search bar, A-Z navigation, and the ability to save or bookmark pages for revision have been especially beneficial.

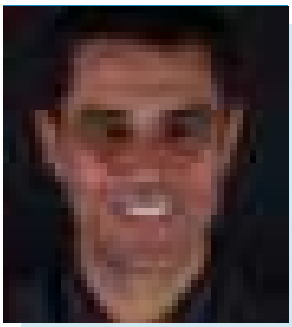
Questionnaires will continue to gather feedback from both students and educators, allowing us to assess the atlas's impact on learning and clinical practice. The outcomes will help demonstrate its value in bridging the gap in oral medicine education and paving the way for more inclusive and effective diagnostic training in oral healthcare worldwide.

Biography

Rida Arain is a final-year dental student at the University of Manchester with a strong interest in academic dentistry and clinical research. In her final year, she was awarded first place in a regional poster presentation competition, reflecting her commitment to evidence-based practice and academic development. She is due to begin her Dental Foundation Training/Dental Core Training in Birmingham, where she will rotate through Oral Surgery, Oral and Maxillofacial Surgery, and Special Care Dentistry. She hopes to develop a career that brings together her passion for surgery and patient care with a sustained role in research and academia.

Biography

Ishmyne Bhamra is dental student going into her final year at the University of Manchester. She previously graduated with a BSc in Biomedical Science from the University of Sheffield and an MSc in Dental Public Health from King's College London. She has published research on teledentistry in nursing homes and has been working on initiating a school toothbrushing scheme in Kenya through international volunteering. She hopes to continue her passion for dental public health and patient care through research and academia.



Rodrigo Alberto Cenci*, José Luiz Bernardom Pretto

Department of Oral Surgery, Universidade Comunitária de Chapecó, Chapecó, Santa Catarina, Brazil

Contemporary orthognathic surgery in the treatment of dentofacial deformities

The number of patients receiving the benefits of orthognathic surgery has grown exponentially. Currently, the indications are not restricted only to occlusal improvement, but also an improvement in facial aesthetics and mainly respiratory improvements. Significant advances in surgical technique contribute to achieving these results, as well as to a better postoperative period. Among them we can mention digital virtual planning and increasingly less invasive techniques for this treatment modality.

Preoperative planning is essential for surgical success. Through facial analysis, we plan skeletal movements and these will be responsible for changes in the upper airway and improved facial aesthetics. Large advances of the maxillomandibular complex and accentuated rotations of the occlusal plane are necessary to achieve the best results. This can often define the choice between conventional orthognathic surgery or minimally invasive orthognathic surgery. The choice between these two techniques can also define success in the immediate and long-term postoperative period. Current literature defines the counterclockwise rotation of the occlusal plane performed in orthognathic surgery as the gold standard for the treatment of obstructive sleep apnea. This surgical movement provides an antero-superior movement for the mandible with significant traction of the suprahyoid muscles and consequently an increase in the area and volume of the pharynx.

In addition to choosing the surgical modality, for long-term success it is necessary to evaluate the anatomy of the temporomandibular joints. Patients with anteroposterior deficiency of the maxillomandibular complex, subjected to major advances, need a thorough evaluation of this joint. Previous degeneration of this joint, as well as detachments of the articular disc when not treated prior to orthognathic surgery, can promote a recurrence of the dentofacial deformity through the evolution of wear on the skeletal structure in the area of the joint.

Finally, digital virtual planning is one of the greatest contributions to the current state of orthognathic surgery. In addition to being able to carry out all pre-operative studies, we can perform a previous virtual surgery, where all surgical movements are simulated and studied. This, in addition to helping to reduce surgical time, allows us to plan the final and expected result of this surgery. It allows discussing possible changes and expected results with patients and orthodontists, thus making surgery safer and more predictable.

Biography

Dr. Rodrigo Alberto Cenci graduated in Dentistry from the Federal University of Santa Catarina in 2003. He is a Specialist, Master and Doctor in Oral and Maxillofacial Surgery and Traumatology from the Pontifical Catholic University of Porto Alegre. Head of the Oral Surgery department at the Community University of the Chapecó Region. He works in the area of Oral and Maxillofacial Surgery and Traumatology at the Unimed Chapecó hospital. He has a postgraduate degree in TMJ Surgery and Orthognathic Surgery.

Dr. Sachin Shashikant Metkari B.D.S., M.D.S., Ph.D.

Professor (Additional), Department of Conservative Dentistry and Endodontics, Nair Hospital Dental College, Mumbai, Maharashtra, India. Maharashtra University of Health Sciences, Nashik, Maharashtra, India

Factors affecting periapical extrusion of debris, irrigating solution and microorganisms during chemo-mechanical preparation of root canal system

Aim: Aim of this presentation is to discuss the factors that influence the periapical extrusion of debris, irrigating solution and microorganisms during chemo-mechanical preparation of root canal system.

Background: Periapical extrusion is major concern in endodontic practice especially during cleaning and shaping of root canal system. This periapical expulsion may result in humoral or cell-mediated immunological reaction such as pain and/or, swelling, causing apical periodontitis and resulting in flare-up. The flare-up may arise due to irritation towards periapical tissue by instrumentation, irrigation and microorganisms which should be minimized even though it may not be avoided. To minimize these periapical expulsions, related factors should be scrutinizing evaluated and discussed. There are several factors that influence apical extrusion of debris, irrigating solution and microorganisms like root length, root curvature and so on.

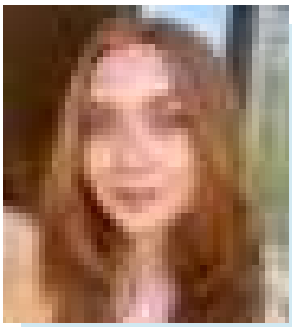
Review Result: Among the hand instrumentation techniques step-back produced more apical extrusion than others. Rotary instrumentation generally produced less apical extrusion than hand instrumentation. Cervical preflaring reduced the apical extrusion comparatively. EndoVac irrigation system expelled less irrigating solution than other systems/techniques.

Conclusion: Step-back hand instrumentation showed more apical extrusion so it should be chosen carefully. Over hand instrumentation, rotary instrumentation should be preferred. Cervical preflaring showed less apical extrusion so it should be followed routinely.

Clinical Significance: This review article discusses various factors responsible for periapical expulsion in detail. This also focuses on how periapical expulsions can be minimized even though it cannot be avoided for successful endodontic treatment with least patient discomfort.

Biography

Dr. Sachin Shashikant Metkari studied bachelor of Dentistry at Nair hospital dental college, Mumbai from Maharashtra university of health sciences Nashik, Maharashtra, India. He had done his post-graduation from Government dental college, and his Ph.D. from Pacific Dental college, Rajasthan, India in 2022. He is now working at Nair hospital Dental college, Mumbai, India as Professor (Additional). He has published 15 research papers. He has presented for 8th and 9th international conference for dentistry and oral health.



Sarah Morgan BDS (Hons) BSc (Hons) MFDS
DCT2 Restorative Bart's Health Trust, United Kingdom

Preserving missing spaces or creating stabilisation cases? - A cautionary example in the use of VFRS for hypodontia management

My case based presentation examines the use of Vacuum Formed Retainers (VFRs) in managing hypodontia, highlighting their benefits and potential risks. VFRs are clear, removable retainers commonly used after orthodontic treatment to maintain alignment and prevent relapse. In hypodontia cases, they can be adapted to aid space maintenance, aesthetics, and soft tissue development for future prosthetic restorations.

A 19-year-old male with hypodontia, missing multiple teeth, presented post-orthodontic treatment seeking a Resin-Bonded Bridge (RBB) for his lateral incisors. He had a history of depression and anxiety, which, combined with stress from studies and shift work, contributed to poor oral hygiene, enamel demineralisation, and plaque-induced gingivitis.

While VFRs offer advantages such as preserving space and enhancing aesthetics, challenges include the need for patient compliance, social inconvenience, and an increased risk of oral health issues if not maintained correctly. The management of this case involved a holistic, multidisciplinary approach:

Oral Hygiene & Retainer Care: Detailed oral hygiene instruction was given, incorporating SMART goals and plaque disclosing to improve compliance. Patient was advised according to British Orthodontic Society guidelines on retainer wear and maintenance.

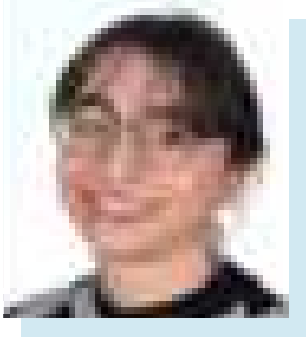
Holistic Care & Medical Coordination: Blood tests arranged through the oral medicine team revealed a folate deficiency, leading to GP-facilitated supplementation. Dietary modifications were advised to reduce caries risk.

Repair & Remineralisation: Minimally invasive composite restorations were placed, and GC Tooth Mousse was provided for nightly application using the retainer as a reservoir to promote enamel repair.

This case highlights the multifunctional benefits of VFRs but also the importance of considering both oral and systemic health factors in dental management. This comprehensive approach to patient care ensures that the tools and methods used to help our restorative/prosthetic work don't hinder us or harm our patients.

Biography

Sarah Morgan is a Dental Core Trainee 2 (DCT2) in Restorative Dentistry at Barts Health NHS Trust, UK. She previously completed her DCT1 at Guy's and St Thomas' NHS Foundation Trust (GSTT), gaining experience in both Oral Surgery and Restorative Dentistry. She studied Dentistry at King's College London after completing a BSc in Biomedical Science at St George's, University of London. In final year, she had the honour of representing her university at the National Dentsply Sirona RCS Edinburgh competition after winning the regional heat, and she more recent achievements include completing her MFDS membership qualification. She has also taken on leadership roles as a Dental Foundation Training (DFT) and DCT representative, advocating for trainees and contributing to professional development initiatives. Research Interests: Currently working on research project looking at the post operative sequelae and its management of anterior maxillary implants (Awaiting approval). No. of published articles and Journals information, Publication in progress of the above case.



Sena Mamurekli[1*], Ailish Clark[2], Brendan Conn[3], Adrian Farrow[4], Vicki Greig[5]

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[2]Oral Surgery, Edinburgh Dental Institute, Edinburgh, Scotland, United Kingdom

[3]Oral Pathology, Edinburgh Dental Institute, Edinburgh, Scotland, United Kingdom

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[5]Oral Surgery, Edinburgh Dental Institute, Edinburgh, Scotland, United Kingdom

Glandular odontogenic cyst: A case series

Introduction: Glandular Odontogenic Cysts (GOCs) are considered a rarity in their cystic classification, histologically characterised by an epitheial lining of salivary or glandular nature. What makes them so interesting in dentistry stems from their benign yet aggressive behaviour and recurrence potential. Despite variation in literature, there is evidence to suggest up to a 30% recurrence rate following enucleation and curettage- the first line management, where possible [1]. They pose a diagnostic challenge in the dental world due to similarities in clinical and histopathological presentation to lateral periodontal, botryoid odontogenic, radicular, residual (with mucous metaplasia) and low-grade mucoepidermoid cysts [2].

Objectives: The purpose of this case series is to describe the clinical presentation of different presentations and management outcomes of GOCs within the Oral Surgery Department at the Edinburgh Dental Institute (EDI). These occurred in relative temporal proximity to one another.

Case Description: The cases involve a 52-year-old female and a 77-year-old female referred urgently by their general dental practitioners to the Oral Surgery Department at the EDI. The former involved an asymptomatic incidental radiolucent finding on a right bitewing between the mandibular second premolar (FDI 45) and first molar (FDI 46). The latter, a feeling of pressure in the upper right maxilla with a history of self-resolved altered sensation. Management differed for both cases. The 52-year-old was managed within the EDI, receiving biopsy, diagnostics, marsupialisation and subsequently enucleation. The 77-year-old was referred to Oral and Maxillofacial Surgery where enucleation and curettage was the first line management. Both cases are currently under monitoring and review considering the risk of recurrence.

Conclusion: These back-to-back cases within the department have helped build a better diagnostic picture of a GOC where multidisciplinary department meetings involving dental radiology and pathology have been of significant input. Whilst the initial management for both cases differed, the intended outcome remained the same: how do we prevent recurrence considering this cyst type's aggressive presentation whilst maintaining and protecting as much of the patient's dentition as possible?

Keywords: Glandular Odontogenic Cyst, Developmental, Case Series, Enucleation, Marsupialisation.

Biography

Sena Mamurekli gained her undergraduate dental degree (BDS) at Cardiff University in 2022. Since then, she has completed a year of dental foundation training within Wales and undertaken both Dental Core Training Years 1 and 2 within the Glasgow Dental Hospital & School, the Public Dental Service (PDS) and the Edinburgh Dental Institute (EDI) respectively. During her time at Glasgow, she completed the MFDS qualification and undertook training within the Paediatric Dentistry and Orthodontic Departments. Her time in the PDS also allowed for further training in inhalation sedation. She is currently training in Restorative Dentistry at the EDI.

Dr Shilpa Khullar Sood*, Dr Megha Jain, Dr Divyam Giridhar, Dr Sakshi Sharma

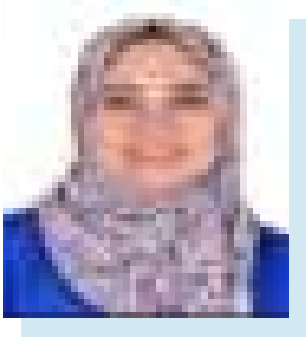
Department of Dentistry, Amrita Hospitals, Amrita Vishwa Veedyapeetham, Faridabad Campus, Haryana, India

Diagnostic dilemma: Odontogenic pain vs non-odontogenic pain, A case series

Pain is one of the most common reasons why patients seek medical attention. When experiencing discomfort in the Oro-facial region, a dentist is usually the first medical professional consulted. While odontogenic factors are the most common causes of acute pain in the maxillofacial region, it can also be non-odontogenic, making it challenging to differentiate between them. However, with a thorough examination, taking a complete history, and ordering necessary diagnostic tests, a dentist can make an accurate diagnosis and evaluate the entire stomatognathic system and other relevant anatomical regions. Misdiagnosis can lead to unnecessary dental procedures and cause trauma to the patients. Case 1 and case 3 were finally diagnosed as trigeminal neuralgia and case 2 as Myofacial Pain due to hypermobile joints with loss of muscle tone. This case series emphasizes the importance of accurate diagnosis to prevent irreversible dental treatment and protect patients from harm.

Biography

Dr. Shilpa Khullar Sood is a highly specialized and experienced Clinical Prosthodontist, Implantologist and general dentist with over than 25 years of clinical experience. In addition, she has teaching experience of over 14 years as a Clinical Professor. Over her career, she has worked at leading Hospitals and Dental Clinics. She completed her BDS from College of Dental Surgery, Manipal, and her MDS in Prosthodontics and Maxillofacial Prosthesis from MAHE University (Manipal) in 1999 securing 1st rank. She completed her specialization training in Surgical Implantology from the American Academy of Implant Dentistry, Chicago, in 2008. Dr. Shilpa Khullar Sood specializes in Aesthetic and Prosthetic dentistry, Implantology, Full Mouth Rehabilitations, Occlusal Rehabilitation and Smile Corrections using Veneers and other techniques.



Shimaa Kotb

Oral Medicine, Periodontology Department, Sphinx University, Egypt

Retrieval of fractured abutment screw of dental implant. Case report

Aim of Study: To establish a protocol for managing implant abutment screw fractures by removing the fractured part without compromising the implant or its functionality.

Methodology: A case highlights the loosening of implant screws as a critical concern in restorative dentistry. The fractured abutment screw was successfully retrieved using an ultrasonic tip, presenting an effective and straightforward sequential protocol for retrieving fractured abutment screws while preserving the integrity of the implant.

Result: Using The ultrasonic tip technique demonstrates a highly significant impact by providing a simple, effective, conservative, noninvasive, and predictable protocol for removing fractured screw abutments from dental implants. Furthermore, this technique enables clinicians to reuse the same implant without causing surgical trauma or imposing any financial burden on the patient.

Conclusions: Retrieving fractured abutment screw without causing damage to the internals of the implants poses a significant challenge for clinicians, often requiring considerable time and effort to address the underlying cause of the fracture.

Keyword: Dental Implant, Retrieval Fracture Abutment Screw, Implant Abutment Screw Loosening, Implant Failure.

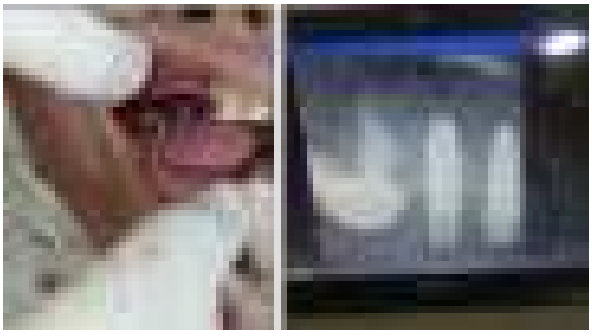
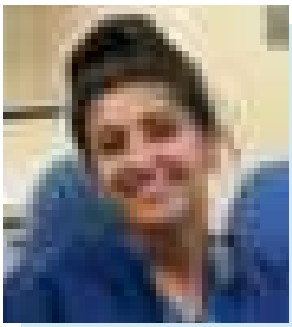


Fig 1: Clinical photograph showing dental implant placement surgically. **Fig (2)** Radiographic photo of inserted implants with final abutment in place before fracture.

Fig 3: Radiographic photo show Fracture abutment screw after picks application.

Biography

Shimaa Kotb is an assistant lecturer at Sphinx University in Assiut, Egypt, specializing in oral medicine, periodontology, oral diagnosis, and dental radiology. She also work as a consultant visitor dentist at the Police Hospital. She graduated from Tanta University in 2001 and completed her education and training in Egypt before practicing clinically in Saudi Arabia from 2004 to 2014. She have pursued a PhD program at Al-Azhar University in Egypt since 2023. Her international journey began in 2010 when she started preparing for the RCS Exam, eventually earning membership after passing several steps. This achievement marked a new and exciting phase in her academic career.



Simran Mann*, Naomi Rahman

Oral Surgery Department, Eastman Dental Hospital, University College of London Hospitals Trust, London, UK

Antimicrobial prescribing across dental specialties at the Eastman Dental Hospital

Introduction: Antimicrobials form an important adjunctive therapy within our field for treating oral infections. Inappropriate prescribing of antimicrobials can exacerbate the issue of antimicrobial resistance, which leads to antibiotics no longer being effective in treating even simple infections.

Aim: To ensure antimicrobial prescriptions from the relevant dental specialties at the Eastman Dental Hospital (EDH) are consistent with current guidelines and best practice as set out by FGDP in 2020. Standard to achieve within audit: 90% of prescriptions to be appropriately prescribed in line with Faculty of General Dental Practice (FGDP) 2020 antimicrobial prescribing in dentistry guidelines.

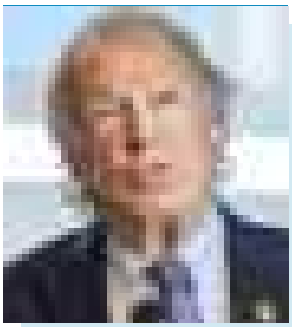
Method: Retrospective data collection over a period of 3 months. Data was retrieved from the prescription logbook used by clinical staff from the relevant dental specialties across different floors at EDH. This information was cross referenced with patient clinical records and checked whether diagnosis, justification and prescription details were recorded. Specialties involved were oral surgery, restorative dentistry, paediatric dentistry, oral medicine and special care dentistry. Prescription entries were categorised into 3 groups; Appropriate (the prescription is clinically justified and prescribed according to guidelines), Inconclusive (the prescription is clinically justified but not prescribed according to guidelines (i.e. error in choice of drug, dose, frequency or duration)), Inappropriate (the prescription is not clinically justified or no clear justification found).

Results: The total number of prescriptions recorded across all specialties at EDH was 381 and the overall percentage of prescriptions meeting the standard was 71%. Paediatric dentistry achieved the highest percentage of appropriate prescriptions (83%). 86 prescriptions were excluded due to no evidence of the prescription being recorded in the clinical notes.

Conclusion: There was generally poor explanation of justification for a prescription being given, demonstrating a lack of contemporaneous record keeping. Going forward, we will update the logbook to include prescription details as well as a prompt on the heading to encourage clinicians to provide a reason for prescribing an antimicrobial. Additionally, we will reinforce the need to utilise the prescription record template for record keeping purposes as well as making use of electronic prescribing to improve prescribing practice amongst dental specialties.

Biography

Dr. Simran Mann studied Dentistry at the University of Bristol, United Kingdom and graduated with a BDS in 2019. She then joined the Royal College of Surgeons of Edinburgh in 2021 and has completed a PG Certificate in Dental Education with the University of Bedford. She worked as a Dental Core Trainee in Oral and Maxillofacial Surgery for 3 years and is now currently working as a Specialty Doctor in Oral Surgery at the Eastman Dental Hospital.



Steven J Traub

Touro University College of Dental Medicine, United States

Modern Temporomandibular Joint (TMJ) surgical treatment

An in depth 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

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. He is a clinical instructor in the Oral & Maxillofacial department at the Touro University College of Dental Medicine (New Mexico campus).

Steven J Traub

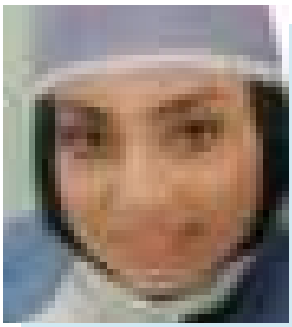
Touro University College of Dental Medicine, United States

Immediate post-extraction molar implant placement

Titanium: The ultimate socket preservative! This lecture reviews the results of an 11-year private practice experience documenting over 800 consecutive cases with an overall success rate of 94% without supplemental bone grafting prior to implant placement. This is the immediate cure for the common failing molar root canal tooth.

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. He is a clinical instructor in the Oral & Maxillofacial department at the Touro University College of Dental Medicine (New Mexico campus).



Tannaz Pourlak

Department of Oral and Maxillofacial surgery, Dentistry Faculty, Tabriz University of Medical Sciences, Tabriz, Iran

Using machine learning algorithms to optimize surgical outcomes in oral and maxillofacial surgeries

Using machine learning algorithms to optimize surgical outcomes in oral and maxillofacial surgeries is a groundbreaking idea that has the potential to revolutionize the field. Imagine a world where personalized treatment plans are created for each patient based on their unique characteristics, previous medical history, and surgical requirements.

Firstly, a database of past surgical cases and their outcomes would be analyzed using machine learning algorithms to identify patterns and trends.

Next, real-time data from ongoing surgeries could be fed into the system to provide surgeons with immediate feedback and insights. For instance, the algorithms could detect subtle changes in vital signs or surgical techniques that may affect the outcome of the procedure.

Furthermore, the machine learning algorithms could be used to predict potential complications or adverse events before they occur. By analyzing data from similar cases in the database, the system could alert the surgical team to potential risks and recommend preventive measures.

In addition, the use of machine learning algorithms could streamline the decision-making process for surgeons by providing evidence-based recommendations and guidelines.

Overall, the integration of machine learning algorithms into oral and maxillofacial surgeries has the potential to optimize surgical outcomes, improve patient safety, and enhance the overall quality of care. It represents a cutting-edge approach to personalized medicine that leverages the power of data analytics and artificial intelligence to revolutionize the field.

Biography

Dr. Tannaz Pourlak is a specialist in oral and maxillofacial surgery. She is currently working as an assistant professor at the School of Dentistry, Tabriz University of Medical Sciences. She believes that educating students and treating patients is not possible without conducting research projects, as science is dynamic. She obtained her doctorate degree in maxillofacial surgery in 2017 and after completing 5 years of residency from at Tabriz University of Medical Sciences. In addition to teaching at the university and conducting research projects, she also has a private office where she treats different patients. She is busy working as the only female maxillofacial surgeon in Tabriz city. She works in various fields of maxillofacial surgery, especially rhinoplasty and orthognathic surgery. Her research resume, which is on in stem cells and oral and maxillofacial surgery fields, is available through the link below.

Prof.(Dr.) Vinay Kumar Bhardwaj

Professor and Head of Department, Public Health Dentistry, H. P. Government Dental College and Hospital, Shimla (Himachal Pradesh), India

Association between asthma and chronic periodontitis - A case–control study in Shimla-Himachal Pradesh

Introduction: The colonization of respiratory pathogens appears to be a risk factor for lung infection in high-risk individuals. Evidences dictate a bidirectional relationship between periodontitis and asthma.

Aim: The aim of this study is to explore this potential association between asthma and periodontal disease.

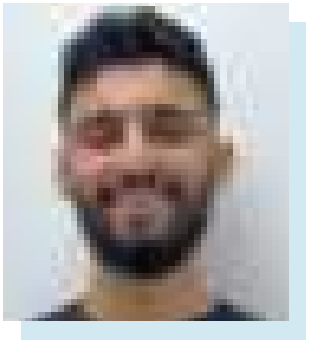
Materials and Methods: In a case–control study the individuals were selected from patients attending asthma clinic in a hospital. Individuals consist of fifty asthmatics and fifty nonasthmatic healthy controls evaluated for Plaque Index (PI), Gingival Index (GI), Papillary Bleeding Index (PBI), Calculus Index (CI), and Clinical Attachment Level (CAL). The data were analyzed by SPSS version 16.

Results: Mean PI scores was 0.649±0.316 for control group in comparison to 1.168±0.46 for asthmatic group. Statistically significant difference among two groups was obtained on a comparison of GI score (P=0.0231) CI scores (0.0461) for control group. CAL was 3.817±0.722 mm and 4.964±0.871 mm in control group and case group, respectively. The difference of CAL for two groups was statistically highly significant (P=0.004). Comparison of PBI of test group and control group showed significant difference Comparison of all the parameters for two subgroups (mild asthmatics and moderate-to-severe asthmatics), i.e. PI, CI, GI, and PBI was statistically significant with P value for respective scores as 0.0281, 0.04, 0.027, and 0.0162. CAL measurement for both groups was highly significant (P=0.001).

Conclusion: The present study reveals an association between the occurrence of chronic periodontitis and asthma. Both periodontal and respiratory diseases have an inflammatory nature. Parameters measured using different indices have revealed higher scores for the asthmatics than nonasthmatics.

Biography

Prof. (Dr.) Vinay Kumar Bhardwaj did his B.D.S. from Goa University in the year 1995 securing top position with Beat Graduate award and Gold Medal. He worked in the Department of Health and Family Welfare for a decade in rural and Far flung area of the state of Himachal Pradesh. He completed his MDS from H.P. Govt. Dental College and Hospital, Shimla in 2009 and since then is working in the Department of Public Health Dentistry. Prof. Bhardwaj has more than 100 Publications in Various journal of National and International repute. He has won many best scientific paper presentation awards in India and Abroad.



Zayaan Humdani*, Ross Orchard, Jaspreet Virdee, Naomi Rahman

Department of Oral Surgery, Eastman Dental Hospital, UCLH NHS Trust, London, United Kingdom

Service evaluation of mandibular third molar coronectomy

Objectives: Coronectomy is an alternative treatment to extraction when managing non carious mandibular third molar teeth, which are in close proximity to the Inferior Alveolar Nerve (IDN). The procedure is considered a risk-reducing strategy to prevent temporary or permanent neurosensory deficit associated with IDN injury.

We conducted a service evaluation investigating current practice of managing patients undergoing coronectomies in a teaching hospital setting, with the aim to streamline practice and reduce unwarranted variation.

Methods: 58 coronectomy procedures, carried out under all anaesthetic modalities, were assessed retrospectively between January 2022-January 2024. Data on preoperative assessment, surgical intervention and post-operative sequalae were investigated. Factors including clinician grade and pre-operative factors, such as antibiotic prophylaxis and radiographic findings, were included in the data analysis.

Treatment failure was defined through the consideration of both symptomatic clinical and radiographic findings necessitating the need for follow up surgical intervention.

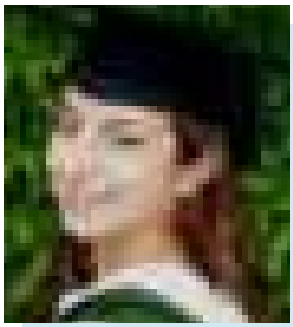
Outcomes: 75.5% of patients had a single postoperative OPG, with 10% of these undergoing multiple radiographic reviews in the post-operative period. Results included the following coronectomy complications: failure rate (6.9%), infection (3.5%), persistent pain (22.4%) and root migration (34.8%). No cases of neurosensory deficit.

Findings were presented locally and informed the creation of a departmental proforma for selection criteria for coronectomy and in the assessment of post operative complications.

Conclusions: Pertinent clinical and radiographic signs in coronectomy failure included persistent pain, retained enamel, supracrestal root positioning and incomplete mucosal coverage. The potential for subjectivity and over-interpretation of radiographic findings, including post operative root migration, highlights the importance of correlating radiographic and clinical findings with patient symptomatology when defining failure. Clear parameters for assessment when diagnosing a failed coronectomy procedure are essential to inform further intervention and associated risks. The authors recommend services carrying out coronectomy to evaluate their current practice to ensure high quality of care.

Biography

Dr. Humdani studied Dentistry at Barts and The London and graduated in 2023. He completed his foundation training in Nottingham, England and currently works as a dental core trainee at the Eastman Dental Hospital within the Oral Surgery department. His post also contains experience within the Maxillo-Facial department at University College London Hospital. He is currently pursuing his interest in Dentistry by partaking in quality improvement projects in order to further develop himself. He has also delivered an online webinar regarding helping new graduates adapt to life as a foundation dentist within the United Kingdom.



Zinab Kassir*, Consultant Melanie Stern

[1]Orthodontic department, Sheffield Teaching Hospitals, United Kingdom

Hospitals vs outreach clinics: Improving socioeconomic inequalities in access to orthodontic treatment

Background: It is well established that there are socio-economic inequalities in oral health. Sheffield is a divided city; life expectancy is nearly 10 years greater for postcodes in the south west side of the city than for postcodes in the northeast side of the city. Sheffield has only one dental hospital providing hospital orthodontic treatment to complex IOTN4 and IOTN5 patient groups. The incidence of more complex malocclusions is assumed to be the same across all socio-economic levels.

Aim: To examine a cohort of orthodontic patients referred to the Charles Clifford Dental Hospital (CCDH), and determine if there is an equal distribution across all socioeconomic levels.

Target: An even distribution of IMD deciles across all patients referred to a hospital orthodontic setting.

Materials and Methods: Data for new patient referrals to the CCDH orthodontic department from October 1st 2019-30th March 2020 were gathered. There were 342 patients, who had been accepted for an orthodontic assessment and lived in the Local Sheffield Authority (LSA). The postcode was used to calculate their level of deprivation using the English Indices of Deprivation (IMD) 2019 Deciles.

The postcodes were mapped to see their geographical distribution. The accessibility of the CCDH was considered by randomly selecting a postcode in the least and most deprived areas and assessing the cost and availability of different modes of transport.

Results: The range of IMD's from our cohort shows that the CCDH orthodontic department gets referrals from patients with different levels of deprivation. Half of the patients referred live in the 30% most deprived areas in England.

Analysis of the cost and availability of different modes of transport to the CCDH shows that patients from more deprived postcodes have to travel further, for longer and pay more to attend their appointments. Patients consider affordability and location as the main reason for not attending annual dental visits. Hospital orthodontic treatment is aimed at patients with severe or complex treatment needs, or patients with special needs or significant medical history. These patients will experience further barriers to attending appointments, e.g. physical barriers, hospital burnout and financial barriers.

Conclusion: The CCDH received referrals from patients across all socioeconomic levels, with a greater proportion coming from areas with high levels of deprivation and from the east side of Sheffield. There is an unequal distribution of patients, with more being referred from the east side of Sheffield, however the CCDH and other orthodontic practices are located on the west side of Sheffield. A reconfiguration of the location and spread of orthodontic services in Sheffield would be useful and could improve the accessibility of orthodontic treatment.

Since completing this service evaluation, an outreach Orthodontic clinic, staffed by CCDH clinicians has now been set up at Wheata Place clinic, which is located in the North-East side of Sheffield in one of the 20% most deprived areas in England.

Biography

Dr Zinab Kassir graduated with a BDS from the University of Sheffield in 2022. She has gained valuable clinical experience at NHS practices and hospitals, including York and Scarborough Teaching Hospitals and the South Manchester Dental Emergency Cooperative. Dr Zinab obtained Membership of Faculty of Dental Surgery from the RCS England. Her contributions to the academic field include national and international presentations at the BAOMS and EOS conferences. Has also published abstracts and articles in multiple journals, such as the Clinical Effectiveness Bulletin. She volunteers with dental charities such as Dentaid and Crisis Management Association in her spare time.

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POSTER PRESENTATIONS

Adolfo Di Fiore[1], Edoardo Stellini[2], Hussain D. Alsayed[3], Abdulaziz Alhotan[4*]

[1]Department of Neurosciences, School of Dentistry, Section of Prosthodontics and Digital Dentistry, University of Padova, Padova, Italy

[2]Department of Neurosciences, University of Padova, Padova, Italy

[3]Department of Prosthetic Dental Sciences, College of Dentistry, King Saud University, Riyadh, Saudi Arabia

[4]Department of Dental Health, College of Applied Medical Sciences, King Saud University, Riyadh, Saudi Arabia

Influence of different post-washing solutions on the mechanical and surface properties of 3D-printed material for definitive restorations: An in vitro study

Objective: To assess the influence of three different wash solutions on the Flexural Strength (FS), elastic modulus (E), surface microhardness (VHN), surface roughness, water sorption (Wsp), and solubility (Wsl) of a 3D-printed glass-reinforced Composite Resin (3D-CR).

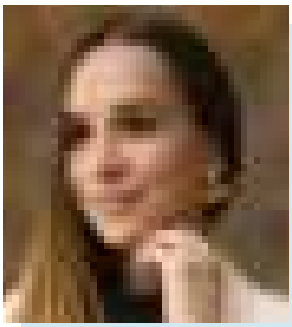
Methods: VarseoSmile Crown Plus was printed at a 50 µm layer thickness and a 90° build angle. Three test groups were formed based on the ultrasonic bath wash solution: InovaPrint Wash (Group 1), 96% ethanol (Group 2), and 90% denatured ethyl alcohol (Group 3). Thirty bar-shaped specimens (25×2×2 mm^3), ten per group, were produced to measure FS and E using a three-point bending test, while five disk-shaped specimens (Ø 15×3 mm^2) per group were employed to evaluate VHN. Both tests were conducted under dry conditions. Additionally, another set of five specimens (Ø 15×3 mm^2) per group was used to assess surface roughness before and after simulated toothbrushing, while five disk-shaped specimens (Ø 15×1 mm^2) were utilized to determine Wsp and Wsl over 28 days. Kruskal–Wallis and Bonferroni post hoc tests were applied for statistical group comparisons.

Results: The Kruskal-Wallis test showed a significant difference between the groups in terms of FS (p =.008), E (p=.004), and VHN (p=.001). Variations among groups were notable in Wsp and Wsl at 21 and 28 days (p=.001). Regarding the surface roughness, the specimens exhibited values surpassing the clinical acceptability threshold (0.2 µm) before and after brushing.

Conclusion: These findings underscore the importance of selecting appropriate washing protocols to optimize the long-term performance of 3D-printed composite resins.

Biography

Dr. Abdulaziz Alhotan is an Assistant Professor in the Department of Dental Health at the College of Applied Medical Sciences, King Saud University, Riyadh, Saudi Arabia. He earned his BSc in Dental Technology, followed by an MPhil and PhD in Dental Materials. Dr. Alhotan's research focuses on the mechanical, physical, and surface properties of dental materials, with a particular emphasis on 3D-printed composites. He has published extensively in high-ranking peer-reviewed journals and has collaborated with numerous prestigious institutions worldwide to advance research in dental materials and digital dentistry.



Ana Beatriz Barroso Nunes
University Center of the Triângulo Region (UNITRI), Uberlândia, Minas Gerais, Brazil

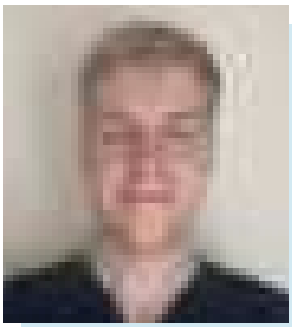
Facial fillers in HIV-associated lipodystrophy: A literature review with a focus on self-perception outcomes

Facial Lipodystrophy (FL) is a common manifestation in HIV-positive patients and is associated with the loss of facial volume caused by prolonged use of antiretroviral therapy. FL is considered a stigmatizing condition that affects not only aesthetic aspects but also self-perception, self-esteem, and patients' overall quality of life. In this context, facial harmonization procedures have emerged as therapeutic tools for restoring facial contours and promoting social reintegration. Consequently, volumizing procedures may contribute to the psychosocial well-being of a stigmatized population. The aim of this literature review is to evaluate facial harmonization as a treatment for FL in HIV-positive patients, including assessments of quality of life and self-perception. The search was conducted in the PubMed and LILACS scientific databases, using descriptors in both Portuguese and English registered in DeCS and MeSH Terms, such as HIV, lipodystrophy, facial harmonization, dermal fillers, quality of life, and self-perception. Original articles published between 2008 and 2025 in Portuguese, English, or Spanish were included, focusing on HIV-positive patients and emphasizing aesthetic and psychosocial outcomes following facial harmonization. The selection process involved reading titles, abstracts, and full texts. Data extracted included: author/year, country, sample characteristics, filler material used, objectives, results, and conclusions. The collected data were organized using Microsoft Excel. A total of 16 studies were included after selection: conducted in the United States (8 studies), United Kingdom (4 studies), and Brazil, Canada, Italy, and Colombia (1 study each). The studies focused on HIV-positive patients aged between 14 and 50 years. The most commonly used materials were Poly-L-lactic acid (56%), hyaluronic acid (31%), autologous fat grafts, and polyacrylamide gel. All materials demonstrated significant improvements in facial appearance, promoting contour restoration and reduction of facial atrophy. Patient self-reports indicated increased self-esteem and improved quality of life, both essential for social reintegration. The most frequent adverse effects were mild and transient, with edema (25%), ecchymosis (15%), and minor inflammation (10%) being the most reported, with no serious complications. Poly-L-lactic acid stood out due to its long-lasting results (12–24 months) and favourable cost-effectiveness ratio. Hyaluronic acid offered rapid but less durable outcomes, while fat grafting showed variable results and required multiple sessions. A key limitation among the studies was methodological heterogeneity. Nonetheless, facial harmonization procedures were found to be effective, safe, and well tolerated in the treatment of FL in HIV-positive individuals. In addition to aesthetic improvements, psychosocial

benefits such as enhanced self-esteem, self-perception, and quality of life were observed. These findings highlight the importance of such interventions as part of comprehensive care. However, the heterogeneity of available studies underscores the need for further robust research to strengthen the evidence base and establish standardized protocols.

Biography

Dr. Ana Beatriz Nunes is a dental surgeon graduated from the Centro Universitário do Triângulo (UNITRI), with specialization in Implant Dentistry and Orofacial Harmonization. Dr. Nunes serves as the technical director and manager at Barroso Odontologia, with expertise in oral rehabilitation, facial aesthetics, and nitrous oxide sedation. She is the author of eBooks and scientific articles and has been featured in over 200 major media outlets. Dr. Nunes actively participates in conferences, mentorship programs, and continuing education projects in the healthcare field, with a focus on safe and innovative clinical practices.



Dr. David Williams[1*], Dr. John Watt[2]

[1]Dental Foundation Trainee, Quantock View Dental Centre, Bridgwater, United Kingdom

[2]Speciality Orthodontic Registrar STR2, Kings College Hospital, London & Royal Surrey Hospital, Guildford, United Kingdom

Age of permanent maxillary canine palpation and basic periodontal examination: A retrospective audit

Background: Early identification of maxillary permanent canine position and timely assessment of periodontal health are critical components of paediatric dental care. The Royal College of Surgeons recommends clinical palpation of maxillary canines from age 8 to identify potential impactions, while the British Society of Periodontology advises initiating Simplified Basic Periodontal Examinations (sBPE) from age 7 to support early diagnosis and management of periodontal issues. Failure to follow these guidelines can lead to complex orthodontic and legal consequences. This audit aimed to evaluate current compliance with these guidelines in primary care and identify areas for improvement in both clinical practice and documentation.

Methods: A two-cycle, criterion-based retrospective audit was conducted at Quantock View Dental Centre. The first cycle reviewed records of 203 patients aged 8 and over who attended between January 1st and March 1st, 2025. The second cycle included 191 patients seen from April 1st to June 1st, 2025, following intervention. Data were extracted from the practice's electronic records (EXACT) and analysed for documentation of maxillary canine palpation and sBPE, with stratification by patient age and examination date. Interventions between cycles included the distribution of guideline-based information sheets, clinician discussions, and note template modifications.

Results: In the first cycle, only 44% of patients had documentation of maxillary canine palpation, with a mean first recorded age of 10 years and 7 months. Documentation of sBPEs was noted in 40% of patients, with a mean initial age of 12 years and 2 months. Following intervention, the second cycle showed substantial improvements: 82% of patients aged 8–11 had canine palpation documented at their most recent examination, and 78% of patients aged 8–15 had a completed sBPE. Notably, palpation and sBPE documentation remained lowest in the youngest patients.

Conclusion: The audit revealed that the gold standards for early assessment of maxillary canines and periodontal health were not initially being met in primary care. However, significant improvements were achieved through clinician education and system changes. Barriers such as clinician familiarity with guidelines and variability in documentation practices persist. Continued efforts, including structured teaching and visual prompts, are recommended to sustain and improve compliance. A re-audit is planned in 12 months to assess long-term progress.

Biography

Dr. David Williams studied Dentistry at the University of Plymouth, UK, graduating in 2023 with Honours. He then completed a year of Dental Core training, working in the Oral and Maxillofacial unit of Musgrove Park Hospital, Taunton, UK, before completing his foundation training in a general dental practice in Bridgwater, Somerset.

Dylan Patel[1*], Thushara Thayaparan[2*], Alisha Amin[3*]

[1]Specialty Doctor in Special Care Dentistry, University College London Hospitals NHS Trust, London, United Kingdom

[2]Specialty Registrar in Special Care Dentistry, Surrey and Sussex Healthcare Trust, United Kingdom

[3]Specialty Registrar in Orthodontics, Buckinghamshire NHS Trust, United Kingdom

Informed or overwhelmed? Exploring patient attitudes toward oral cancer

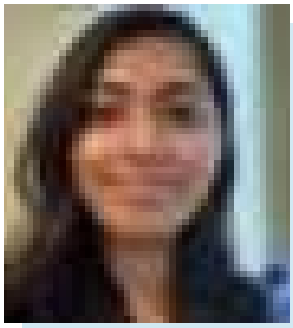
Introduction: Our understanding of oral cancer and its associated risk factors has evolved considerably over the last decade. Research shows social and lifestyle factors can significantly influence a patient's risk status. Risk assessing every patient and providing tailored preventative advice is imperative.

Methodology: A questionnaire based evaluation was carried out involving 205 adult dental patients attending primary care centers in London and Portsmouth over a two-month period. After inter and intra personal standardisation steps were carried out, a pilot evaluation was completed and relevant changes made prior to final data collection. Patients' awareness of their risk status of developing oral cancer and their knowledge on the associated risk factors were assessed.

Results: The results highlighted that only a small proportion of patients (26.8%) were aware of their risk status for oral cancer. In contrast, a significant majority (86.3%) believed they should have been informed of this by their dentist, as such knowledge could impact their lifestyle choices.

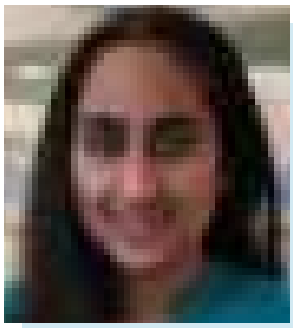
More focus needs to be placed on improving awareness of smoking cessation services and advice, with only 36.6% of those who smoke having been asked or signposted to smoking cessation services by the dental team. There were similar results regarding the provision of alcohol advice, with only 41.8% being advised on reducing their alcohol intake.

Conclusion: With oral cancer cases on the rise globally, effective management relies heavily on early prevention and detection. This evaluation highlights a significant gap in patient awareness regarding their oral cancer risk status. Increasing patient education and ensuring dentists communicate risk factors clearly are essential steps toward improving early detection and encouraging healthier lifestyle choices. Enhanced awareness can ultimately lead to better outcomes and reduced incidence of advanced oral cancer cases.



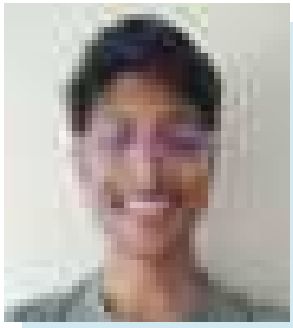
Biography

Dr. Thushara Thayaparan studied dentistry at King's College London and graduated in 2021. She then completed her Foundation training and Dental Core Training year in Oral and Maxillofacial Surgery and Community Dentistry. Following this, she worked for two years within the Community Dental Service in Surrey, gaining valuable experience in treating patients with complex and additional needs. She is currently a speciality trainee in Special Care Dentistry, where she continues to develop her clinical expertise. She is passionate about providing high-quality dental care to vulnerable patient groups and has a keen interest in service improvement and multidisciplinary care.



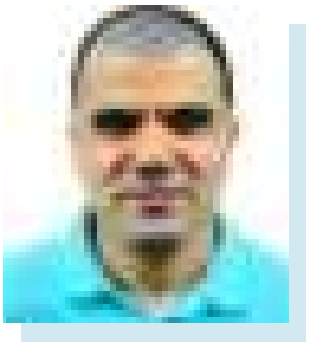
Biography

Dr. Alisha Amin graduated from Kings College London in 2021. She completed her dental core training in Oral and Maxillofacial surgery as well as Paediatric dentistry. She is currently a specialty registrar in Orthodontics with a keen interest in cleft care. She has completed a multitude of quality improvement projects and is dedicated to play an active role in improving care for her patients. To supplement her clinical roles, she has completed then MFDS qualification with the Royal College of Surgeons of England.



Biography

Dylan Patel graduated from King's College London in 2021 and has experience within oral surgery and special care dentistry. He completed Dental Core Training in Oral and Maxillofacial Surgery at Queen Alexandra Hospital, earning Membership of the Faculty of Dental Surgery. He further trained in Special Care Dentistry at Cardiff Dental Hospital while completing a Postgraduate Certificate in Medical Education. Currently, Dylan works as a Specialty Doctor at University College London Hospital, providing care in haematology and oncology services. His interests lie within oral surgery, multidisciplinary management of medically complex patients, and education.



Fellahi Samir
University of Algiers, Algeria

Pulpotomy in mature teeth with symptomatic irreversible pulpitis

Pulpotomy, traditionally reserved for immature teeth, is emerging as a viable treatment for irreversible pulpitis in mature permanent teeth. This shift challenges the conventional belief that irreversible pulpitis mandates Root Canal Treatment (RCT). Recent studies (Taha & Abdulkader, 2018; Ricucci et al., 2014) suggest that inflammation is often confined to the coronal pulp, leaving the radicular pulp capable of healing.

Objective: To evaluate the outcomes of full pulpotomy using MTA and Biodentine in mature teeth with symptomatic irreversible pulpitis at the Central Military Hospital's Endodontics Department.

Methods:

- **Patients:** Cases presenting with acute pulpitis (spontaneous pain, prolonged sensitivity to cold, no periapical lesions).
- **Technique:**
    - o Coronal pulp removal under rubber dam isolation.
    - o Hemostasis with 1–5% NaOCl (achieved within 5 minutes).
    - o MTA placement and sealed restoration.
    - o Postoperative analgesia (ibuprofen 400 mg/48h).
    - o **Follow-up:** Clinical/radiographic evaluation at 1, 3, and 6 months.

Results:

- **Pain Relief:** 90% of patients reported complete resolution within 48h.
- **Success Rates:** 85% asymptomatic at 6 months; 70% showed dentinal bridge formation radiographically.
- **Failures:** 5 cases required RCT due to persistent pain (attributed to incomplete hemostasis or undetected necrosis).

Discussion: Our findings align with modern evidence:

- **Histological Reality:** Inflammation is often localized (Ricucci, 2014), permitting pulp preservation.

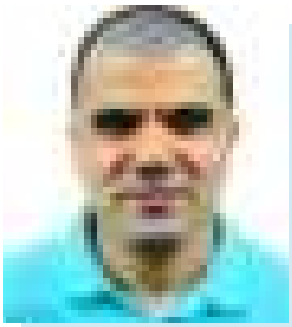
- **Advantages Over RCT:** Simpler, faster, cost-effective, and preserves tooth vitality.
- **Limitations:** Case selection is critical (strict exclusion of necrosis/periapical pathology).

Conclusion: Pulpotomy with MTA is a paradigm shift in managing irreversible pulpitis, offering a biologically grounded, minimally invasive alternative to RCT. While long-term data are needed, our clinical experience supports its adoption for select mature teeth, emphasizing the need to reassess the irreversibility dogma.

Keywords: Pulpotomy, MTA, Irreversible Pulpitis, Vital Pulp Therapy, Minimally Invasive Endodontics.

Biography

Fellahi Samir Endodontist at the Algiers University, he graduated as a dentist in 1999, then he worked in many structures. From 2004 he began his speciality, after that, he obtained his assistant professor rank in 2011. Actually; he is head of department and lecturer at the military hospital in Algeria since 2022.



Fellahi Samir
University of Algiers, Algeria

Endodontic surgery in Algeria

Endodontic treatment is a fundamental aspect of modern dental practice. However, its failure frequently leads to the necessity of extracting the affected tooth.

In this context, endodontic surgery emerges as a valuable second-line therapeutic option. It enables the management of persistent periapical lesions through direct surgical access to the apical portion of the root, facilitating the removal of pathological tissue and the sealing of the root canal system from the retrograde approach.

Historically regarded as a technically demanding procedure with uncertain prognosis, endodontic surgery has experienced significant advancements in recent years. The integration of microsurgical techniques, the development of high-precision microsurgical instruments, and the use of innovative biocompatible materials—such as Mineral Trioxide Aggregate (MTA) and Biodentine have contributed to markedly improved clinical success rates.

As a result, endodontic surgery now represents a reliable and evidence-based therapeutic solution. It plays a vital role in the preservation of natural dentition and has become an integral part in our modern endodontic practice.

Biography

Fellahi Samir Endodontist at the Algiers University, he graduated as a dentist in 1999, then he worked in many structures. From 2004 he began his speciality, after that, he obtained his assistant professor rank in 2011. Actually; he is head of department and lecturer at the military hospital in Algeria since 2022.

Dr. Isaac Chan

Specialty Dentist Oral Surgery, Bristol Dental Hospital, United Kingdom

Virtual reality simulation training for nursing staff: Enhancing skills in managing post-thyroidectomy haemorrhage

Background: Post-Thyroidectomy Haemorrhage (PTH) is a potentially fatal complication due to the risk of airway obstruction. The British Association of Endocrine and Thyroid Surgeons (BAETS) guidelines highlight the critical role of Nursing Staff (NS), as first responders, in promptly recognising and escalating care. Virtual Reality Simulation Training (VRST) offers an innovative and risk-free method to replicate emergency scenarios, enabling NS to develop critical skills and ensure patient safety.

Objectives: The primary objective was to train 70% of NS on a head and neck surgical ward, in a tertiary hospital, in recognising and managing PTH. Secondary objectives included evaluating VRST's impact on knowledge acquisition and confidence.

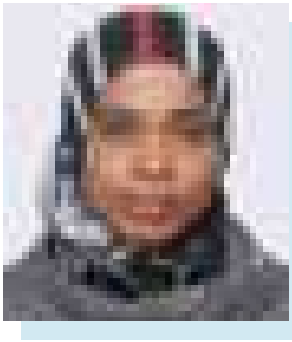
Methods: All participants were offered a VR module simulating PTH, followed by a lecture on the BAETS protocol. Pre- and post-training assessments measured knowledge and confidence. Feedback was collected via surveys. Paired t-test was performed on the percentage total assessment scores.

Results: Thirty-six participants completed the training course (100% of NS were trained in 5 hours), with 97% engaging in VRST. Pre-and post-training total mean assessment scores demonstrated significant improvement in knowledge acquisition: 44.6% to 75.5% ($p<0.0001$). Mean confidence ratings were also increased from 2.5 to 4.2. Participants overwhelmingly endorsed the training, with 83% rating 5/5 usefulness and 94% would like more VRST in the future.

Conclusion: VRST is a highly effective and engaging method for equipping NS with the skills necessary to manage PTH. This study highlights its potential as a scalable training tool to improve clinical knowledge and patient safety outcomes in emergency situations.

Biography

Isaac Chan graduated in 2020 from the University of Bristol. Since graduating, Isaac completed two dental core training years in OMFS and Oral Medicine. This was followed by a year as a Teaching Fellow in OMFS. In his current role he works as a Specialty Doctor and Clinical Lecturer at Bristol Dental Hospital and Bristol Dental School respectively. He also works as a general associate dentist.



Kerry Webster, Marwa Abdalgaffar*

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Pressure necrosis of the maxilla following prolonged orotracheal intubation: A rare case report

Pressure necrosis of the maxilla is an exceptionally rare complication associated with prolonged orotracheal intubation. This case report describes a 63-year-old edentulous female referred to the Oral and Maxillofacial Surgery department by her general dental practitioner due to two areas of exposed, non-vital bone in the anterior maxilla. The lesions had been present for approximately three years and were attributed by the patient to a prolonged intensive care admission in 2021, during which she underwent extended orotracheal intubation.

Clinical examination and investigations confirmed osteonecrosis of the anterior maxilla. The patient had no history of bisphosphonate therapy, radiation exposure, or other known risk factors for osteonecrosis. This case highlights the potential for pressure-induced ischemic damage to maxillary bone in edentulous patients.

The aim of this report is to increase awareness of maxillary pressure necrosis as a possible, though rare, consequence of prolonged intubation. Early recognition and appropriate referral are crucial for timely management and prevention of further complications.

Biography

Marwa studied Dentistry at the Khartoum University, Sudan and graduated in 2004 and completed her internship at Khartoum teaching dental hospital. She worked as GDP in Sudan for few years before moving to the UK, where she passed the ORE and registered with the GDC in 2015. She earned MFDS from the Royal College of Surgeons of Edinburgh in 2018. Marwa practiced as a GDP in the UK until 2023, then joined the Dental Core Training specialty program. Now in her third year, she is expanding her clinical expertise.

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Pilot Study: Personality Types and Traits of Oral and Maxillofacial Surgeons

Abstract: The Myers-Briggs Type Indicator identifies 16 personality types amongst 4 dichotomies. Physicians and Dentist have show dominance of ESTJ and ISTJ personality types with dichotomy traits of sensing, judging and thinking. Oral and Maxillofacial Surgeons are a unique specialty of dentistry that possess a surgical background. This specialty has not been identified in personality studies. Data was collected using a self-reported questionnaire among practicing Oral and Maxillofacial Surgeons (n = 71). Statistically significant results were found with a dominant personality of ENTJ ($p<.001$), which has not been identified as dominant for physicians or dentists. Personality traits were statically significant for judging, thinking, intuition and extrovert. The dominant Intuition trait is a new finding for physicians and dentists. Oral and Maxillofacial Surgeons are leadership oriented with structured organization and logical decision making strengths.

Introduction: The Myers-Briggs Type Indictor (MBTI) questionnaire identifies different psychological preferences on how the world is perceived by a person affecting their decision choices based on Carl Jung's theory of psychological types conceived in the 1920s1-2. MBTI was developed in the 1940s by Katharine Cook Briggs and Isabel Briggs Myers3 with four identifiable personality traits establishing the 16 distinct personality types1. The four identifiable personality dichotomies are identified as, energy source, extrovert (E) versus introvert (I); information gathering, sensing (S) or intuition (N); decision making, thinking (T) versus feeling (F); and lifestyle approach, judging (J) versus perceiving (P)3. This MBTI questionnaire has been used as a guide for careers, leadership, communication, learning, counselling and coaching1-5. The MBTI is considered to be a reliable and validated questionnaire for determining personality traits.

Studies of physicians and dentist have shown ESTJ and ISTJ dominant personality types1-2 Studies differ on extroversion versus introversion dominance in the medical and dental fields2. One of the most consistent results pertaining to health professional personalities is the sensing (S) and judging (J) traits. In addition, it has been shown that physicians in surgery specialties greater personality trait of thinking (T).

Oral and Maxillofacial Surgeons are a unique type of dental specialists who combine dental expertise with advanced surgical training with focus on dental, bone and soft tissues of the head and neck region with some Oral and Maxillofacial Surgeons having both a dental and medical degree. Oral and Maxillofacial Surgeons have not been studied regarding personality type with associated dichotomy traits.

Materials and Methods: Data was collected using a self-reported questionnaire distributed to practicing Oral and Maxillofacial Surgeons across the United States of America. Complete data were available for 71 questionnaires that was obtained from February 7, 2025 to April 2, 2025. Questions induced personality results from the Myers-Briggs Type Indicator, number of working days per week, participation in hospital call and trauma call.

Results: This study showed of the 71 Oral and Maxillofacial Surgeons (Chart 1) that 30.1% of the surgeons had ENTJ personality type; whereas, ESTJ 16.9% and ISTJ 12.3% accounted for the 2nd and 3rd most common personality types. These three personality types made up 58.8% of the surgeons. The remaining 41.2% was found to be distributed among INTJ, ENFJ, ISFJ, ESFJ, INFJ, INFP and ENFP. Of the 16 personality types 6 were not found amongst the surgeons. ENTJ at 30.1% stands out when compared to the general population of 1.8% ($p<.001$) (Chart 2). Dominant dichotomy traits (Table 1) were found to be Judging 97.2% ($p<.001$), Thinking 71.8% ($p<.001$), Extrovert 66.2% ($p = 0.013$) and Intuition 56.3% ($p = 0.013$).

In addition to personality types number of days worked averaged 4.5 of those surveyed with range of 3 to 5 days a week with 57.7% of those surveyed working 5 days a week. Along with numbers of days worked Surgeons found to be participating in hospital call was 67.6% and of those 47.9% included facial trauma call as part of their hospital call requirements. No personality type or trait correlated to numbers of days worked, nor participating in hospital or trauma call.

Conclusions and Future Direction: This study reveals that Oral and Maxillofacial Surgeons have a dominant statistically significant personality type of ENTJ ($p<.001$). ESTJ ($p = 0.023$) was also found to be significant in comparison to the general population trends. Results were similar to previous studies of ESTJ and ISTJ dominant personality types for Medical and Dental professionals, but the ENTJ personality was not dominantly present in other studies or the general population1-2, which is a new finding of a dominant personality type specific for the Oral and Maxillofacial Surgery specialty. All dominant dichotomy personality traits were statistically significant in comparison to the general population. This study revealed dominant judging, thinking, intuition and extrovert, which differed from other studies of dominant sensing over intuition and mixed results of extrovert versus introvert1-2.

Overall results suggest Oral and Maxillofacial Surgeons are leadership oriented with structured organization and logical decision making strengths. The ENTJ and ESTJ personality types differ with informational gathering where ENTJ lean towards innovation and new ideas compared to ESTJ focusing on detail and proven methods for consistency.

Future directions involve obtaining a larger data base to verify findings.

Biography

Melissa Moutray has received her dental degree and medical degree from University of Nebraska Medical Center. She completed Oral & Maxillofacial Surgery residency at University of Nebraska Medical Center, Omaha, Nebraska. She is a fellow of the American College of Surgeons and a Diplomate of American Board of Oral & Maxillofacial Surgery. She is currently a private practice Oral & Maxillofacial Surgeon at Nebraska Oral & Facial Surgery in Lincoln, Nebraska.

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Assessment of the clinical effectiveness of botulinum toxin type A in oral and maxillofacial surgery

Background: Botulinum Toxin (botox) has been used medically to manage various conditions such as chronic migraines, overactive bladder, hyperhidrosis to name but a few. This toxin works by inhibiting the release of a chemical called acetylcholine, which is responsible for muscle contraction. By blocking this release, botox relaxes the muscles, reducing spasm and other symptoms. Temporomandibular Joint Disorders (TMJD) are common affecting 5-12% of the population, it is multifactorial and a number of surgical and non-surgical management options are available. Surgical options come with their own risks and so the non-surgical option of botox was explored for it's effectiveness in oral and maxillofacial surgery.

Objective: The aim is to assess the clinical effectiveness of botulinum toxin type A (Botox) in oral and maxillofacial surgery, focusing on it's use in managing various conditions within the specialty such as temporomandibular joint disorder, bruxism, and hyperfunctional conditions.

Methods: A retrospective review was conducted on 50 patients who received botox as part of their treatment between July and December 2024. Clinical outcomes, including symptom relief, functional improvement, and patient satisfaction, were evaluated through medical records and patient feedback. Additionally, complications and adverse effects were recorded to assess the safety profile of the treatment.

Results: Botox provides significant symptomatic relief in conditions such as bruxism and temporomandibular joint disorders with patients reporting improvements in pain reduction and jaw function. The clinical effectiveness of botox is consistent with existing literature in the field.

Conclusion: This highlights the benefits of botox in oral and maxillofacial surgery, offering a valuable non-surgical option for managing specific conditions. Further prospective studies are recommended to standardise treatment protocols and fully evaluate long-term outcomes.

Biography

Dr. Shah studied Biomedicine at the University of East Anglia followed by Dentistry at Peninsula Dental School. She completed her practice training by 2013, which is when she started her dental core training in secondary care. Following on from her professional qualifications, she started to develop a passion for academia and started a teaching programme within the department, focusing on dental core trainees. The organisation of which, in time has demonstrated the importance of non-surgical management options of certain conditions within the specialty due to potential complications that can arise from surgical management options.

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Full medical history completion at new patient clinics within the restorative department at the Edinburgh Dental Institute (EDI)

Introduction: The National Health Services' Business Services Authority (NHSBSA) takes from the Department of Health and Social Care (DHSC), the British Dental Association (BDA) and indemnity organisations to help formulate guidance on how frequently a medical history should be updated. Their guidance is the following: computerised records should keep a signed and dated baseline medical history questionnaire and be ideally updated every course of treatment, signed by the patient and clinician Utilising this, an audit was conducted within the Restorative Department of the EDI aiming to assess whether 100% of medical histories have a full medical history that has been completed within the Electronic Health Record ((EHR) medical history tab in R4) at new patient assessment/first appointment.

Methodology: 98 patients were selected (January 2024 to November 2024) from all new patient clinics after a sample size calculation using Raosoft Inc. Three assessors collected information on whether the medical history tab was fully completed on the R4 software, which clinician grade this was and whether any updates or attempts were made at completing it at a later date. For reliability, an inter-rater reliability assessment was conducted.

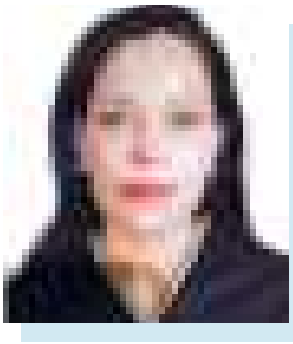
Results: 50% of 98 patients had no full medical history form completed at initial patient assessment within the MH tab. Relevant medical history was often noted in the R4 notes section. 14% of forms had a discrepancy between the MH tab and the MH notes and 13% had no update of the MH tab for subsequent visits.

Discussion: A change was suggested to aim for improvement in compliance levels. To reach 100% compliance, nurse involvement was encouraged, and a new Standard Operating Procedure (SOP) was discussed. On the R4 dental software, starting a new MH record within the tab prevents the clinician from leaving the page until the form has been saved. Additionally, an email was sent out to promote a workshop for those that may not be aware of the requirement of form completion and how to incorporate this with time efficiency.

Conclusion: The findings were discussed at a department meeting and a second cycle of data collection is expected to review for any improvement and determine if 100% compliance, whilst the gold standard, is currently an attainable goal.

Biography

Sena Mamurekli gained her undergraduate dental degree (BDS) at Cardiff University in 2022. Since then, she has completed a year of dental foundation training within Wales and undertaken both Dental Core Training Years 1 and 2 within the Glasgow Dental Hospital & School, the Public Dental Service (PDS) and the Edinburgh Dental Institute (EDI) respectively. During her time at Glasgow, she completed the MFDS qualification and undertook training within the Paediatric Dentistry and Orthodontic Departments. Her time in the PDS also allowed for further training in inhalation sedation. She is currently training in Restorative Dentistry at the EDI.



Briki.S*, Hablani.H, Belaid.D, Elleuch.W, Mnif.Z, Dhouib.M, Karray.F, Abdelmoula.M

Department of maxilla-facial surgery Habib Bourguiba University Hospital Sfax Tunisia

Basal implants: An alternative to conventional implants

Objective: The field of basal implantology is experiencing significant growth, with an increasingly broad range of applications.

This study aims to describe the principles, indications for basal implants, and the implant protocol.

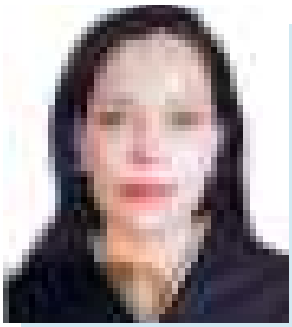
Materials and Methods: We report 10 cases of basal implantology managed in our department, including pre-implant assessment, indications, surgical procedures, and prosthetic outcomes.

Results: Patients were partially edentulous in cases mainly involving the posterior region, and completely edentulous in others. The indications were diverse: one case involved a free fibula flap with microvascular anastomosis previously irradiated; an other a patient with a surgically treated ossifying fibroma; five cases with periodontal disease; one case of severe bone atrophy; and two cases aimed at restoring masticatory function as quickly as possible. Implant placement was performed mostly under general anesthesia. Functional loading was achieved within one week, with a patient-reported satisfaction level considered excellent.

Conclusion: Basal implantology represents an excellent therapeutic alternative that meets patient needs with minimal complications. The target patient population is increasingly broad. However, proper training and mastery of the surgical technique are essential.

Biography

Dr. Sondes Briki specialist in maxillofacial surgery, graduated in medical university of Sfax in Tunisie since 2010. She is practicing for 15 years. Trained at the Faculty of Medicine in Sfax, she gained her expertise at the Habib Bourguiba University Hospital in Tunisia and the Lille University Hospital in France. She currently hold the position of Associate Professor in Maxillofacial Surgery.



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Challenge in the management of severe mandibular deficiency

Introduction: Significant mandibular deficiency presents functional impairments such as malocclusion, airway obstruction, compromised mastication and aesthetic concerns. While Mandibular Distraction Osteogenesis (MDO) is often considered in extreme cases requiring large advancements, classic orthognathic surgery remains a well-established approach with predictable outcomes.

Objective: To assess the aesthetic and functional results of classic bimaxillary orthognathic surgery, without mandibular distraction, in the treatment of severe mandibular deficiency.

Methods: Five young patients (ages between 19 and 26 years) with pronounced skeletal Class II malocclusion and severe mandibular retrusion were managed surgically. Although MDO was initially proposed due to the extent of mandibular deficiency (advancements of 12 to 15 mm), it was not performed due to financial limitations. Instead, all patients underwent orthognathic surgery, combining maxillary impaction with Bilateral Sagittal Split Osteotomy (BSSO) for mandibular advancement (>1cm), supplemented by genioplasty to enhance chin projection.

Results: Major improvements were seen in occlusion, chewing function, and airway comfort. Aesthetically, there was a marked enhancement in lower facial balance and profile projection. No significant complications occurred, and all five patients reported high satisfaction levels.

Discussion: These results underline the effectiveness and reliability of conventional surgical techniques even in cases where large mandibular advancements are needed. In selected patients, especially where MDO is not feasible, classic orthognathic procedures remain a valuable alternative.

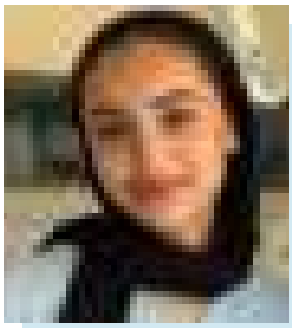
Conclusion: Bimaxillary osteotomy, associated with genioplasty, can provide excellent correction of severe mandibular retrognathia. Even in the absence of distraction techniques.

Biography

Dr. Sondes Briki specialist in maxillofacial surgery, graduated in medical university of Sfax in Tunisie since 2010. She is practicing for 15 years. Trained at the Faculty of Medicine in Sfax, she gained her expertise at the Habib Bourguiba University Hospital in Tunisia and the Lille University Hospital in France. She currently hold the position of Associate Professor in Maxillofacial Surgery.

Yogesh Patel*, Asmah Omrani*, Mitul Patel

Restorative Department, Barts Health NHS Trust, London, England



The endodontic management of a dilated odontoma: A case report

Aim: To outline the endodontic management of a dilated odontoma with an orthograde and retrograde approach, utilising CBCT imaging and 3D-printed models to aid in the treatment planning process.

Summary: This case describes the management of a 15-year-old female patient that was referred to tertiary services regarding an ectopic canine. On initial examination the patient presented with an asymptomatic dilated odontoma of the maxillary right lateral incisor with a large apical radiolucency and associated sinus tract.

The patient presented with a class II division II incisal relationship on a skeletal II base with reduced vertical proportions complicated by a multitude of factors including a dilated odontoma which appeared anatomically complex to negotiate, a palatally ectopic maxillary right canine and an increased overbite in addition to her expectations of an aesthetic outcome. Orthograde endodontic treatment was initiated on the dilated odontoma, however following several inter-appointment dressings there was no resolution of the sinus tract. A CBCT confirmed a complex root canal system whereby the invagination did not communicate with the main canal. This led to the decision to carry out retrograde endodontic treatment in combination with the extraction of the ectopic canine under general anaesthesia. A consideration for the long-term prognosis of the endodontic treatment was required given the patient's age, which would allow for subsequent treatment options in the future. Following a three-month review there was clinical and radiographic evidence of healing including resolution of the sinus tract, reduction in the size of the periapical lesion and osseous infiltration.

The management of this dilated odontoma case highlights the importance of a multi-disciplinary approach to treatment planning alongside thorough clinical and radiographic investigations. A digital workflow using CBCT imaging to fabricate a 3D printed study model of the tooth aided in the preparation for the procedure. This aspect of treatment planning shows how the combination of traditional and modern approaches can achieve reliable results while maintaining tooth structure and achieving positive treatment outcomes.

Key learning points:

- Explanation of the classifications of dens invaginatus (Oehlers' classification) and their associated clinical and radiographic findings.
- Understand the challenges in treatment using a case report of the treatment of a dilated odontoma.
- Consideration of the use of CBCT and 3D printed plastic models as a key diagnostic tool in aiding in the treatment planning of the management of dilated odontomas and dens invaginatus.
- Understand the importance of how anatomy can influence decisions on the need for both orthograde and retrograde endodontic procedures.
- Consideration of the prognosis of endodontic treatment of these teeth, and the need for a multi-disciplinary approach to consider alternative treatment options.

Biography

Dr. Yogesh Patel graduated with honors from Barts and The London School of Medicine and Dentistry in 2023 with a Bachelor of Dental Surgery. He's currently serving as a Dental Core Trainee within Restorative Dentistry and has successfully completed the Membership of the Faculty of Dental Surgery examination.

Dr. Asmah Omrani earned her Bachelor of Dental Surgery (BDS) from Barts and The London School of Medicine and Dentistry in 2023. She's currently serving as a Dental Core Trainee in General Duties and Restorative Dentistry and has successfully completed Part 1 of the Membership of the Faculty of Dental Surgery examination.

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