

7<sup>TH</sup> EDITION OF  
INTERNATIONAL CONFERENCE ON  
**DENTISTRY**  
**AND ORAL**  
**HEALTH**

**27-29, 2023**  
**APRIL**  
**ORLANDO,**  
**FLORIDA, USA**

CE Accredited



Exhibitor



**STRATEGIC TAX  
PLANNING**

**Venue:**

Hilton Garden Inn Lake Buena Vista/Orlando  
11400 Marbella Palm Ct, Orlando, FL 32836, United States



27-29 APRIL

BOOK OF  
ABSTRACTS

7<sup>TH</sup> EDITION OF  
INTERNATIONAL CONFERENCE ON

# DENTISTRY AND ORAL HEALTH

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**Kanika Gupta Verma**  
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# Speakers



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**Victor Fabrizio Cabrera  
Pazmino**  
University of Sao Paulo, Brazil

# Welcome Message

The invitation to write this welcome message is both an honor and a privilege and as such, I am very grateful to the Organizing Committee of American Dental 2023. On behalf of the Organizing Committee, I would like to welcome you to this hybrid conference either in Orlando, Florida, or online. You will have the opportunity to listen to internationally recognized speakers on a wide range of topics over the course of the conference. There will also be an opportunity for fellow researchers to present their research 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.

*DG Gillam*

**David Gillam**

Queen Mary University of London, United Kingdom



# Keynote Speakers



**David Gillam**  
Queen Mary University of  
London, United Kingdom



**Laurindo Moacir Sassi**  
Cancer Center Erasto Gaertner  
and Evangelical Mackenzie  
University Hospital, Brazil



**Tamer Theodory**  
University of New England  
College of Dental Medicine,  
United States



**Lydia Katrova**  
Medical University of Sofia,  
Bulgaria



**Fares Kablan**  
Galilee Medical Center,  
Israel



**Preetinder Singh**  
Academy of Oral Surgery,  
United States



**Bennete Fernandes**  
SEGi University,  
Malaysia



**Anup Kumar Panda**  
College of Dental Science &  
Research Centre, India



**Kamlesh S Gurnaney**  
Nair Dental College,  
India

*Thank You  
All...*





## ABOUT MAGNUS GROUP

Magnus Group (MG) is initiated to meet a need and to pursue collective goals of the scientific community specifically focusing in the field of Sciences, Engineering and technology to endorse exchanging of the ideas & knowledge which facilitate the collaboration between the scientists, academicians and researchers of same field or interdisciplinary research. Magnus Group is proficient in organizing conferences, meetings, seminars and workshops with the ingenious and peerless speakers throughout the world providing you and your organization with broad range of networking opportunities to globalize your research and create your own identity. Our conferences and workshops can be well titled as 'ocean of knowledge' where you can sail your boat and pick the pearls, leading the way for innovative research and strategies empowering the strength by overwhelming the complications associated with in the respective fields.

Participation from 90 different countries and 1090 different Universities have contributed to the success of our conferences. Our first International Conference was organized on Oncology and Radiology (ICOR) in Dubai, UAE. Our conferences usually run for 2-3 days completely covering Keynote & Oral sessions along with workshops and poster presentations. Our organization runs promptly with dedicated and proficient employees' managing different conferences throughout the world, without compromising service and quality.



## ABOUT

### American Dental 2023

Magnus Group is excited to extend an invitation to the upcoming scientific gathering "7th Edition of International Conference on Dentistry and Oral Health" to be held as a hybrid event on April 27-29, 2023 in Orlando, Florida, USA and virtually. The conference aims to explore the theme of "Blending Today's Lifestyle with Dental Trends for Vibrant Smiles." The summit aims to bring together a diverse mix of dental professionals, including researchers, scientists, academicians, dentists, dental practitioners, oral surgeons, dental hygienists, dental assistants, dental technicians, students, and other related healthcare professionals to discuss and examine innovative developments in the field of dentistry. The conference will focus on topics such as dental implants, cosmetic dentistry, oral surgery, periodontics, endodontics, orthodontics, and other relevant areas of dentistry. Attendees will have the opportunity to enhance their knowledge and interact with international colleagues, leaving the event with scientifically revitalized ideas.

We hope you will have an enjoyable and productive conference experience, gaining valuable insights into the latest advancements in dentistry and establishing meaningful connections within the dental community.

# EXHIBITOR



## STRATEGIC TAX PLANNING

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[SMARTERTAXPLANNING.COM](http://SMARTERTAXPLANNING.COM)

Strategic Tax Planning is made up of Certified Professional Accountants and other financial professionals with the main goal of making tax planning simpler. With the current tax landscape, our team's priority is to assure that individuals, businesses, and other accountants are aware of essential credits, incentives, and stimulus programs available to them. Based out of Maryland, our firm supports clients across the U.S. with smarter, simpler, end-of-year tax planning options.

# CE CREDITS



The Continuing Education (CE) credits offered at American Dental 2023 are highly valuable for attendees, as they recognize and validate their continuous learning and professional development efforts. There are several benefits to earning CE credits, including career advancement, maintenance of professional credentials, increased knowledge, and networking opportunities. Attending American Dental 2023 and earning CE credits can demonstrate a commitment to ongoing learning and development, enhance professional reputation, and increase opportunities for career advancement. Additionally, earning a minimum number of CE credits may be required to maintain certifications or licenses in many professions. American Dental 2023 Conference also provides ample opportunities for networking with peers and experts, expanding professional networks, and building relationships with potential collaborators. It's worth noting that each conference attendee will receive a total of 24 CE credits.

27-29 APRIL

DAY 01

KEYNOTE FORUM

7<sup>TH</sup> EDITION OF  
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## Resin infiltration for the management of initial caries lesion

Dental caries is the most common oral disease world-wide. The first signs of enamel demineralization caused by cariogenic process are the initial caries lesions which are referred to as white spot lesions which can form as early as two weeks following plaque accumulation. These lesions manifest as white opaque discoloration which compromises the esthetics and could result in cavitation in patients who are at high caries risk. The first line of treatment of Initial caries lesions is remineralization with fluoride containing topical agents which helps to arrest the activity of the lesion. However, the esthetic resolution with fluoride may not be guaranteed. Other treatment options such as enamel microabrasion and veneers improves the esthetics. However, these treatment options are less conservative and may include the removal of tooth structure. Caries resin infiltration is a microinvasive treatment in which the initial caries lesion is perfused with a synthetic resin which arrest the activity of the caries lesion and enhances the appearance of these lesions.

### Audience Take Away Notes

- Understand the advantages and limitations of caries resin infiltration
- Understand the indications and contraindications of caries resin infiltration
- Demonstrate the technique of caries resin infiltration
- Understand the applications of caries resin infiltration
- Audience will be able to apply this technique in clinical practice to improve the oral health of the public and achieve the esthetic goals of the patients
- This provides a practical solution to a problem that could simplify or make a designer's job more efficient
- It will improve the accuracy of a design, or provide new information to assist in a design problem



### Tamer Theodory

The Department of Restorative and Clinical Sciences, University of New England College of Dental Sciences, Portland, Maine, USA

### Biography

Dr. Tamer Theodory earned a D.D.S. from the School of Dentistry, University of Jordan. Dr. Theodory worked at the private practice in Amman city, Jordan. He joined the Operative Dentistry graduate program at the University of Iowa College of Dentistry and Dental Clinics, where he earned a degree in Master of Science, Major in Oral Science and a Certificate in Operative Dentistry. Dr. Theodory is currently serving as a faculty member at the University Of New England College Of Dental Medicine on Portland, Maine.

## Face philosophy - Synergy of interdisciplinary paradigms in the age of AI

The Face is the determinant choice for diagnosis, from a macro esthetic perspective, in many clinical situations. The FACE is also an analogy for Functional and Cosmetic Excellence. The seemingly two different concepts are interrelated and equally important for the Aesthetic clinician. The Face philosophy in diagnosis and treatment planning, envisages the following tenets

1. Position of Incisors and Jaws as a framework of the soft tissue envelope.
2. Morphology of the hard tissue framework.
3. Shapes and Volumes of the soft tissue envelope.
4. Functional and Cosmetic Excellence.

Diagnosis has evolved into a modern biological model with greater emphasis on soft tissues. The boundaries for dental treatment with respect to the soft tissue are dictated by several aspects of soft tissue relationship and function.

1. Lip teeth relationship and anterior teeth display during speech and function also called as the Planned Incisor position.
2. Pressure exerted on teeth by the lips, cheek and tongue
3. Limitations of periodontal attachment
4. Neuromuscular influences on mandibular position
5. Contours of the soft tissue mask
6. Airway

Synergy between the above parameters and hyper parameters can be achieved by deep neural machine learning in AI parlance.

### Audience Takes Away Notes

- The advent of predictive technology like AI and machine learning is going to make our patients more accepting of the treatment goals as well as more demanding of the outcomes. It is up to us to harness our potential, as a complete aesthetic solution provider by collaborating various disciplines of dentistry
- Treatment planning process can be done from multidisciplinary perspective in an effort to balance the very complex process of diagnosis, with the need for simplicity and coherence



### Kamlesh S Gurnaney

Principal Orthodontist, Le Lotus clinic, Kuwait & Kool Smiles Clinic, Mumbai, India

### Biography

Kamlesh S Gurnaney, studied Dentistry at Nair Dental, Mumbai, and secured a Gold medal for academic excellence in various disciplines of Dentistry. His post-Doctoral research involved studying soft tissue and Hard tissue Face characteristics of the indigenous cosmopolitan population. His passion led him to publish his research & present at various national and international conferences. He received the coveted Gold Plaque of the International Collegiate of Dentists. He has a thriving Private Practice in the heart of Mumbai and a visiting practice at Salmiya, Kuwait.

## The use of buccal free fat tissue graft to enhance primary soft tissue closure during socket preservation and ridge contour improvement at the extraction sites

**Objectives:** The aim of this presentation to share a new technique utilizing the Buccal Free Fat Tissue Graft (BFFG) harvested from the Buccal Fat Pad (BFP) for socket preservation, allowing primary closure and socket seal at the extraction site.

**Materials and Methods:** Twelve patients (9 women, 3 men; mean age 37) with 28 extraction sites were treated using BFFG for socket preservation and followed-up over 12-60 months post operatively. Ten patients received 22 implants in 25 treated sockets, and 2 patients were treated by conventional fixed partial denture over 3 treated sockets. BFFG was placed covering different bone grafting material in fresh extraction sockets without the use of membrane. Patients were examined clinically and radiographically at 2, 4 weeks, 2- and 4-months post operatively. At 4 months computed tomography was performed to evaluate soft and osseous tissues dimensions of the treated sites. Implant placement was performed 4-5 months post operatively.

**Results:** Following BFFG grafting, healing was uneventful, with minimal morbidity. Follow-up revealed that socket volume was preserved when compared to the original dimension prior extraction. Soft tissue healing showed perfect color match with the surrounding tissue.

**Conclusions:** Harvesting of BFFG from BFP is a simple procedure with minor complications that might be used to enhance primary soft tissue closure of an extraction site. This technique allows improvement and maintaining long-term ridge contour and soft tissue thickness, and blends in the neighbouring attached gingiva.

**Keywords:** extraction site, socket preservation, free fat graft, buccal fat pad, soft tissue grafts, soft tissue management



**Fares Kablan**

Galilee Medical Center, Israel

### Biography

Dr. Kablan was born and raised in Israel. He completed his D.M.D. at Tel Aviv University and then went on to study his M.D at the Technion - Israel Institute of Technology. He completed his Oral & Maxillofacial Surgery Program at the Maxillofacial Department Poria Hospital, where he resided as a Senior Consultant at the department until 2017. After that, he moved to work at the Galilee Medical Center. Dr. Kablan's current clinical practice in the office is focused on Nerve transposition, Anodontia-associated syndromes, facial esthetics, implant and bone grafting surgery, Orthognathic and corrective jaws surgery, Trauma and TMJ surgery. Dr.Kablan developed new methods and techniques on hard and soft tissue grafting that were introduced as clinical innovations at the academy of Osseointegration in the US. Dr. Kablan the first oral surgeon to describe and use the free fat tissue from the Buccal Fat Pad in the oral cavity. Currently, Dr. Fares Kablan (D.M.D.) is the Deputy Head of The Galilee College of Dental Sciences in the Galilee Medical Center. In 2021 Dr. Kablan was chosen by the Global Summits Institute as one of the best 100 doctors in the world.

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DAY 01

**SPEAKERS**

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**Naomi Conger\* and Dr. Venney Wong**

Grove City College Chemistry Department, Grove City College, Grove City, PA, USA

## **Effects of mouthwashes on leaching of cytotoxic monomers (TEGDMA, UDMA) and BPA from Dental resin composite fillings**

In the past several decades resin composite fillings have become the most popular filling material used by dentists for restorations. This is mainly for aesthetic reasons because the composites match the color of the tooth. The resin composites consist of organic monomers, inorganic filler particles and other components. The backbone of the organic monomers that we are studying are bisphenol A-glycidyl methacrylate (Bis-GMA) and urethane dimethacrylate (UDMA), which gives the filling a rigid structure. Other components such as triethylene glycol dimethacrylate (TEGDMA) and 2-hydroxyethyl methacrylate (HEMA) are used as diluents to reduce the viscosity of Bis-GMA and UDMA. However, numerous studies have found that these components can leach off the composites due to stress from chewing or exposure to solutions like ethanol. Furthermore, it has been found that TEGDMA and BPA can have cytotoxic effects on cells. While BPA is not directly used as an ingredient in resin composite fillings, BPA is a precursor in the synthesis of Bis-GMA. In this study, eight different experiments were performed where two types of resin composites were rinsed with two different types of mouthwash containing varying concentrations of alcohol, a 75% ethanol solution, and an alcohol-free mouthwash for the control. The mouthwash rinses were run through a gas chromatography – mass spectrometry (GC-MS) instrument to find any traces of monomers, diluent, and BPA that had leached out from the cured composites. Based on previous studies, when a 75% ethanol solution was used as an extraction media, it had caused the largest amount of monomer to leach off.

The goals of this research were to:

1. Determine which of two types of resin composites with different components will leach monomers
2. Determine which mouthwash rinse will cause composites to leach monomers.

### **Audience Take Away Notes**

- The audience will learn about the chemistry of two types of resin composite filling materials
- The audience will learn about the effects of different ingredients in mouthwashes on the leaching of harmful components from resin composites
- The information presented may help dentists in selecting mouthwashes to use in their offices
- There are several areas of these experiments that can be explored further by researchers in chemistry and/or dental fields

### **Biography**

Naomi Conger is a third-year student at Grove City College in north-western Pennsylvania. She is studying Biology/Health and plans to attend dental school when she graduates in 2024. She has been participating in independent research in the chemistry department for the past two years and has selected this project based on her interest in the dental field.





**Narjiss Akerzoul**

International University of Rabat, Morocco

## **Inflammatory cytokines cell expression to predict the malignant transformation of oral mucosal lichen planus**

**Introduction:** Oral Mucosal Lichen Planus (OMLP) is common diseases where current evidence has shown cell-mediated immunity are involved in the cause of OMLP. A new IL-17 producing CD4 T cell Subset, Th17, is thought to play a role in maintaining this immune system equilibrium. Recently Th17 (CD4+ IL-17) cells were identified in periodontal disease tissue and were thought to play a role in pathogenesis of periodontal disease.

**Materials and Methods:** To determine, through a literature review, whether Th17 immune cell expression is associated with the clinical type and pathogenesis of oral mucosal lichen planus (OMLP).

**Results & Discussion:** The aetiology of OMLP remains unclear. A delayed hypersensitivity immune reaction, in which the release of cytokines by activated T cells leads to the attraction of inflammatory cells and to the destruction of keratinocytes by cell-mediated cytotoxicity, has been implicated in the pathogenesis of OLP. Recent studies indicate that the cytokine IL-17 is the major mediator of tissue inflammation in several autoimmune and inflammatory diseases, and concluded that Th17 cells may play an important role in the pathogenesis of OMLP. IL-17 can contribute in the pathogenesis of OLP by enhancing T cell-mediated reactions and inducing production of chemokines and other cytokines and therefore, predict the eventual malignant transformation of oral mucosal lichen planus (OMLP)

**Conclusion:** In conclusion, this literature review suggests a possible role of IL-17 in the pathogenesis of OMLP and may support a hypothesis that shifting of the immune system towards a Th17 response may be involved in OMLP.

### **Biography**

Narjiss Akerzoul received her Doctorate of Dental Surgery (DDS) from Mohammed V University of Rabat-Morocco in the year 2011. Later she worked as a General practitioner Dentist in Oral Health Center of Guelmim City, Morocco. Later in 2013, she started her residency program in Oral Surgery and Oral Medicine in the Consultation Center of Dental Treatments of Rabat. Later on, she completed her University Diploma in Biostatistics and Research Methodology during 2014-2015. She achieved her Board examination of Oral Surgery and Oral Medicine in July 2017 and became An Oral Surgeon Attending. Besides, she completed her University Diploma in Medical Pedagogy during 2017-2018, in the Faculty of Medicine and Pharmacy of Rabat. In late 2021, she joined the International University of Rabat where she is currently occupying the position of Assistant Professor in Oral Surgery and Oral Medicine. In October 2022, she joined the reputed "International Association of Oral and Maxillofacial Surgery" (IAOMFS) and became an Associate Member of IAOMFS. She has authored and co-authored more than 20 International papers in the field of Oral Surgery, Oral Medicine and Oral Oncology.



**Ashraf Refaie<sup>1,2\*</sup>, Christoph Bourauel<sup>1</sup>**

<sup>1</sup>Oral Technology, Dental School, Medical Faculty, University of Bonn, Bonn, Germany

<sup>2</sup>Departments of Fixed Prosthodontics, Fayoum University, Fayoum, Egypt

## **The effect of cyclic loading on fracture strength of 3D printed zirconia crowns and CAD/CAM zirconia crowns: An in-vitro study**

**M**onolithic zirconia crowns with full anatomic contour without the need for adding a veneer layer have been developed allowing an improvement in color and translucency of zirconia materials, and the development of final contour of the dental crown using computer aided design and computer-aided manufacturing (CAD/CAM) principles. The subtractive technology allows the usage of tooth-colored restorations with highly accepted properties but the waste from the manufacturing process increases the need for additive technology. In the past years, the innovation in 3D printing allows the production of 3D printed zirconia crowns, but the data available for their properties and their long- term functions is limited and needs more investigations. Moreover, it produces geometries whose shapes are almost identical to the final geometries. The fracture resistance of all-ceramic restorations is one of the major concerns in clinical applications of these materials; also the dynamic loading reduces the fracture resistance of dental ceramics.

To test the properties of 3D printed crowns and if the technique produces clinically accepted results: 30 zirconia crowns will be divided into 2 groups according to the fabrication technique: Group A: 3D printed zirconia crowns (n=15), Group B: CAD/CAM monolithic zirconia crowns. (n=15)

Each group will be further subdivided into 2 subgroups; one subgroup will be immediately loaded under static load until fracture, and the other will be subjected to 1.2million cycles followed by static loading until fracture:

Subgroup Ai: 3D printed zirconia crowns immediately loaded until fracture. (n=9), Subgroup Af: 3D printed zirconia crowns subjected to 1.2million cycles and then statically loaded until fracture. (n=6), Subgroup Bi: CAD/CAM monolithic zirconia crowns immediately loaded until fracture. (n=9), Subgroup Bf: CAD/CAM monolithic zirconia crowns subjected to 1.2million cycles and then statically loaded until fracture. (n=6).

### **Audience Take Away Notes**

- Recent advances in 3D printing technology
- The steps of manufacturing of 3D printed crowns
- Is the 3D printed zirconia can withstand the forces in patient mouth
- Effect of cyclic loading on strength of the 3D Printed crowns
- Our results will help other researchers to investigate more about the other properties of the 3D printed zirconia crowns and help in modifying its properties

### **Biography**

I am Dr. Ashraf Refaie; I studied Dentistry at Ain Shams University, Egypt and graduated in 2009. Then I finished my master's degree in 2015 then my PHD in 2020 at Ain Shams University. I have been working as a teaching staff since 2014. Now I am doing my postdoctoral fellowship supervised by Professor Christoph Bourauel at oral medicine technology, Bonn University funded by the FGD. I had 2 international publications, and I had an oral presentation at IADR in 2019 Madrid Spain.



**Thushara Thayaparan\*, Alisha Amin, Dylan Patel**

Institution – King's College London, London, United Kingdom

## **An Evaluation of the percentage of patients who have received adequate preventative education relating to their risk status for periodontal disease, tooth wear, caries and oral cancer and their risk factors**

**Background:** Oral diseases affect around 3.5 billion people globally. A vast majority of these diseases are preventable, provided patients have been educated on how to manage their risk factors.

The provision of gold standard preventative care has proven to be challenging especially in developing countries. With a worldwide shift to health promotion and disease prevention, this audit aims to explore patient awareness of their oral disease risk statuses and ways to improve patient education.

**Aims and objectives:** To assess patients' awareness of their risk status and relevant preventative knowledge for: caries, periodontal disease, oral cancer, and tooth wear.

To determine which formats of delivering preventative advice are most effective.

**Method:** 205 adult dental patients participated in a self-administered questionnaire within primary care clinics in London and Portsmouth. Data was then collected and analysed, with recommendations provided.

**Results:** Results highlighted that a minority of patients were aware of their risk status for the four dental diseases questioned, whilst the majority of patients would have liked to have been informed this by their dentist. 72.9% of people thought a digital risk assessment form which provides them with advice will improve their understanding of their oral health.

**Conclusions:** The audit exemplified the need for novel methods of conveying preventative education effectively to patients.

Recommendations include the use of a digital risk assessment model which provides all patients, regardless of where they seek treatment, with the same high quality level of care, thus reducing health inequalities.

### **Audience Take Away Notes**

- To understand the importance of making patients' aware of their risk statuses for dental conditions
- Thus, further improving patient-dentist relationships and reinforce preventative Dentistry within the community
- To aid clinicians to identify the most useful methods of providing preventative care to patients

### **Biography**

**Thushara Thayaparan** studied Dentistry at King's College London, United Kingdom and graduated with honors in 2021. She then undertook a year of Dental Foundation Training in a dental surgery in Surrey. She now is completing her core Dental training in Kent, as a maxillofacial SHO.



**Dylan Patel** studied Bachelor of Dental Surgery at Kings College London, UK before completing his foundation training in North London. He has a particular interest in oral surgery and is currently completing further postgraduate training within the Oral and Maxillofacial department at Queen Alexandra Hospital.



**Alisha Amin** studied dentistry at Kings College London before completing her foundation training within a primary care practice in North London. She currently completing further postgraduate training within the Oral and Maxillofacial department of the Royal Free London NHS trust. Alisha's particular interests lie within pediatric dentistry and dental public health.



**Renata Tucci<sup>1</sup>, Bruna Contador<sup>2\*</sup>, Juliana Costa de Oliveira<sup>3</sup>, Rafael Golghetto Domingos<sup>4</sup>, Alexandre Jun Zerbini Ueda<sup>4</sup>, Hilton Sadayuki Tiba<sup>4</sup>, Silvia Cristina Nunez<sup>5</sup>**

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<sup>5</sup>Coordination of the Professional Master in Bioengineering, Brazil University, UNIVBRASIL, Itaquera, SP, Brazil

## Brazilian paralympic athletes: An evaluation of oral health status

**Objective:** To estimate the oral health status and investigate lifestyle habits that may reveal risk factors for dental caries of Brazilian competitive athletes and thus identify which oral health problems may impact their performance, enabling the implementation of public policies focused on this population.

**Material and Methods:** This study collected data to describe the oral health status of Brazilian Paralympics Athletes participating in a government funded program named “Sports Dentistry for High Performed Athletes” performed at the Institute of Health Research – INPES in Sao Paulo, Brazil. A total of 96 high performed paralympic athletes were screened by 4 trained and calibrated dentists. Oral hygiene, reports of oral pain, TMJ examination, and malocclusion index and socio-demographic information were recorded.

**Results:** The age of the athletes ranged from 18 to 56 years, with a mean age of 34 years. The majority of the athletes were swimmers (55.2%). 27.1% had gum bleeding, and 31.0% reported tooth sensitivity. 47.9 % had class I (Angle) and most athletes (71.9%) didn’t show clinical signs of temporomandibular disorders. The mean of decayed, missing and filled index (DMFT) was 10.5, varying 0 to 28.

**Conclusions:** Clinical examinations indicate a population that significantly needs preventive and restorative oral health procedures. We hope that our data will be useful and assist the responsible authorities in creating curative and preventive public policies for the analyzed population.

### Audience Take Away Notes

- Presenting the relevance of sports dentistry that goes far beyond mouth guards which includes a diagnosis of dental problems, pathologies, prevention and their impact on the athletes performance
- Revealing in which way the epidemiological data collected are useful and help the responsible authorities in creating curative and preventive public health
- Rising a questioning of epidemiological data for dentists within their place of operation. How much these athletes and para-athletes have suffered dental impacts that can interfere with their income and provide more health. Whether through public health and or clinical applications

### Biography

Dr. Bruna Contador Martins studied Dentistry at Paulist University, in the city of São Paulo, Brazil and graduated as a dental surgeon in 2013. During her studies she applied for a scientific initiation course in pathology, which she received a scholarship from the government and along with her course final paper in Dentistry. She completed her specialization in orthodontics with an emphasis on facial orthopedics at the same institution in 2018. In 2022, she completed a postgraduate degree in Strategic Business Management at Mackenzie University. Currently, she works as a dental surgeon in her own office in two cities in the state of Sao Paulo.





**Mahmoud Al Ankily**

Department of Oral Biology, Faculty of Dentistry, the British University in Egypt, Cairo, Egypt

## **A rat experimental model for investigation of the effect of diabetes on submandibular salivary glands treated with epidermal growth factor**

**Background:** Despite the plethora of research around the negative effects of diabetes on different body organs, this topic still attracts a lot of attention to find potential remedies that could counteract or reverse the damaging effect of diabetes.

**Aim:** In this study, we developed a reliable experimental rat model that can be used for the investigation of the ability of epidermal growth factor (EGF) in restoring the normal architecture of oral tissues after being damaged by diabetes.

**Methods:** Eighty adult male albino rats (average weight  $\pm 220$  gm) were used in the current study. Twenty rats served as control and received no treatment. Diabetes was induced in 40 rats using a single injection of 65 mg/kg of streptozotocin. Out of the 40 diabetic rats, 20 rats received a single daily intraperitoneal injection of epidermal growth factor (EGF) (10  $\mu\text{g/Kg}$ ) for 8 weeks. Furthermore, 20 healthy rats received the same dose of EGF and served as positive controls. The submandibular salivary glands of all rats were examined for immunohistochemical detection of myosin in the glandular structure.

**Results:** The EGF-treated group showed comparable myosin expression to the control group. The diabetic group revealed deterioration of all components of the submandibular salivary glands. Finally, the diabetic + EGF group has demonstrated restoration of the myosin expression levels in the submandibular salivary glands to a level that is not significantly different from healthy (nondiabetic) rats in the control group ( $p > 0.05$ ) and significantly higher than the diabetic group ( $p < 0.0001$ ).

**Conclusion:** The findings of the present study confirm previous studies and validate the use of our animal model as predictable experimental tool to investigate the effects of diabetes and EGF on different oral tissues. It also highlights the importance of further research investigating EGF as a promising treatment modality for the restoration of the condition and functions of tissues damaged by diabetes not only in the oral cavity but also around the whole body.

### **Audience Take Away Notes**

- This research that other faculty could use to expand their research or teaching
- This provide a practical solution to a problem that could simplify or make a designer's job more efficient
- It improves the accuracy of a design, or provides new information to assist in a design problem

## Biography

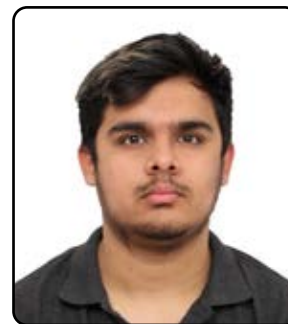
Mahmoud Al Ankily completed a Doctorate Degree in Oral Biology at, the Faculty of Dentistry, Suez Canal University, in 2016, and an M.Sc – Master Degree in Oral Biology, Faculty of Oral and Dental Medicine, Cairo University, 2010, also done B.D.S – Bachelor's Degree of Dental Science, Faculty of Oral and Dental Medicine, Cairo University, 2004.

- Associate professor of Oral Biology, Faculty of Dentistry, The British University in Egypt, 2021-present.
- Associate professor of Oral Biology, Faculty of Dentistry, The British University in Egypt, 2016-2021.
- Lecturer of Dental Photography, Faculty of Dentistry, The British University in Egypt, 2017-present.
- Certified Dental Photographer, University of Birmingham, 2016-present.
- A. Lecturer of Oral Biology, Faculty of Dentistry, the British University in Egypt, 2012-2016.
- A. Lecturer of Oral Biology, Faculty of Dentistry, Modern Science & Arts University, 2010-2016.



**Dr Jacinth Simeon\*, Dr Nrashant singh,  
Aaryan Likhite**

Amity University Dubai, United Arab Emirates



## Identification of the race/Ethnicity by calculating the area of tooth and gonial Angle using 2D imaging and software

Since the beginning of time, forensic odontology has played an important part in identification. The major goal of this study is to assist countries who harbour different nationalities or population and race from all over the world their Security systems (particularly those in charge of immigration, borders security, and investigations) in improving their accuracy and shorten duration of investigations in identification of the individual by non-Invasive odontological methods thus assist in cases who breach the borders with false identity, such as of terrorist acts and unclaimed bodies. We've compared the area of the lower first molar tooth keeping in consideration of angle of mandible by 2D imaging in three different races: Indian (Mongoloids), African (Cognoid), and Pilipino (Austronesian). We have derived formula of Molar tooth=Area of rectangle /1.468254 and Area of Anterior tooth=Area of rectangle /1.49937. Results of statistical analysis have shown significant differences with p values AREA OF ANTERIOR TOOTH : AFRICAN INDIAN P value .884 { NOT SIGNIFICANT } : AFRICAN PHILIPINES . P Value .000 {VERY SIGNIFICANT } INDIAN PHILIPINES .P VALUE 000 {VERY SIGNIFICANT} AREA OF GONIAL ANGLE:: AFRICAN INDIAN P VALUE.044 ::{ VERY SIGNIFICANT } : AFRICAN AND PHILIPINES 0.030 { }VERY SIGNIFICANT INDIAN PHILIPINES 1.000 ( NOT SIGNIFICANT ) AREA OF MOLAR TOOTH : AFRICAN INDIAN .p value 1.000 : (NOT SIGNIFICANT ) AFRICAN AND PHILIPINES - 1.000 ( NOT SIGNIFICANT ) INDIAN PHILIPINES P VALUE 858 ( NOT SIGNIFICANT ).

### Audience Take Away Notes

- It can be used to identify people or terrorist who try to breach the security with false identity. and also dead bodies in case in forensic investigations
- It will reduce the time for investigation and identification of the bodies which can narrow the whole process using the said formulas it takes minutes to draw some information about the human
- It is a research which other faculty can use for expand their research or trainingsimplifies and makes job efficient
- We have elaborated on different criteria on which accuracy has been gained

### Biography

Dr Jacinth Simeon a post graduate in forensic odontology passed in distinction recognized by Indian dental association, Mumbai also a postgraduate in clinical research , she has completed her bachelors in dental surgery 2004 from Rajeev Gandhi university of health science Karnataka India and practicing safe dentistry in UAE since 2011 and before that in Indian with 18 yrs. of experience she is also affiliated with amity university Dubai UAE since 2019 and published some research paper in forensics .she has been speaker for world police summit Dubai 2022 and many seminar for Raichur police headquarters in 2022 and in 2019 karnataka india. And also speaker for the home guards raichur karnataka India.



**Mohamed Shamel<sup>1\*</sup>, Shereen Nader<sup>2</sup>**

<sup>1</sup>Oral Biology Department, Faculty of Dentistry, The British University in Egypt, Egypt

<sup>2</sup>Medical Sciences Department, Faculty of Dentistry, The British University in Egypt, Egypt

## Effect of photobiomodulation on odontogenic differentiation of human gingival mesenchymal stem cells

**Introduction:** The use of Mesenchymal Stem Cells (MSCs) in regenerative dentistry is becoming an increasingly vital and interesting area of research. MSCs derived from dental origins have shown great applications due to their multilineage differentiation potential and self-renewal capacity. Gingival MSCs are among the dental MSCs that is characterized by a unique immunomodulatory function in addition to its multipotent differentiation ability. Gingival MSCs are considered to be of a very accessible origin and could be considered as an alternative source of MSCs to be used in regenerative dentistry. Photobiomodulation has been reported to be a promising source to positively affect the MSCs self-renewal and differentiation ability.

**Aim:** In this study, photobiomodulation was used to investigate its effect on the odontogenic differentiation ability of gingival MSCs.

**Methods:** Gingival MSCs were collected and characterized by flowcytometry and multilineage differentiation ability. Cells were seeded in 24 well plates for odontogenic differentiation and were irradiated once by laser of wavelength 890nm at energy 3J/cm. Cultures were grown for 14 days after which alkaline phosphatase (ALP) assay, Alizarin red staining and odontogenic markers by real-time PCR were measured.

**Results:** ALP and Alizarin red measurements of irradiated cultured cells showed a statistically significant greater mineralization than control samples. Odontogenic markers were also found to be significantly greater in irradiated cells. Conclusion: The results showed that gingival MSCs responded positively to the photobiomodulation in terms of odontogenic differentiation.

### Audience Take Away Notes

- Gingival MSCs can be utilized as an accessible source of MSCs
- Photobiomodulation can enhance the odontogenic potential of gingival MSCs
- Further research can be done to detect the effect of different dental materials on MSCs when irradiated with photobiomodulation

### Biography

Mohamed Shamel, associate professor of Oral Biology, has his expertise in studying different diseases affecting the oral cavity tissues. Correlating the research work with the clinical implications is a main focus in his studies. Research areas include stem cell and regenerative dentistry, preventive dentistry and salivary gland diseases.

**Alok Dwivedi**

Najran University, Saudi Arabia

## **Anterior loop connector fixed partial denture – A case report**

Replacement of anterior teeth with ridge defect and diastema is a complex challenging scenario with regards to the prosthesis as well as esthetics. Different aesthetic treatment options such as implant-supported restoration, conventional fixed partial denture, and removable partial denture need to be explored in treating such a patient. Problems posed may include drifting of teeth into edentulous areas which may reduce available pontic space, whereas diastema existing before an extraction may result in the excessive mesiodistal dimension of pontic space. In such cases, loop connectors may be used to maintain the diastema in a planned fixed prosthesis. This article aims to describe the procedure for the fabrication of a loop connector fixed partial denture to restore an excessively wide anterior edentulous space in a patient with existing spacing between the maxillary anterior teeth.

### **Biography**

Dr. Alok Dwivedi has completed his MDS at the age of 28 years from Devi Ahilya Vishva Vidyalaya Indore (M.P.) India. He is currently working as senior lecturer in Department of Prosthetic dental sciences, Faculty of Dentistry, Najran University, Saudi Arabia. He has Published 10 papers in reputed journals and has been serving as a reviewer in journals of repute. He has a vast experience in academics and clinical dentistry with a passion for research.





**Dalia M. Ghalwash**

Faculty of Dentistry, The British University in Egypt, Egypt

## Advances of salivary biomarkers in oral cancer and precancer detection

Oral cancer is considered the sixth most common cancer across the world, creating a significant global health burden. Despite the progress in preventive and therapeutic strategies, delay in oral cancer diagnosis remains a major cause of high morbidity and mortality. On the other hand, the survival rate increases up to 80% if an early diagnosis is achieved. Salivary biomarkers constitute major progress in diagnosis of oral cancer and are a rapidly developing arena of scientific research, it is also considered a promising prognostic and diagnostic tool in oral malignant and oral premalignant conditions. The purpose of this study is to report the most recent data on the diagnostic and prognostic value of salivary biomarkers in oral cancer and precancer.

**Methodology:** A literature search was performed using the Cochrane library and PubMed databases from 1995 till present.

**Results:** In the recent biological era “omics” method is a new biomarker detection tool that emphasis on exploring many molecules presents in saliva. Presently, five main salivary diagnostic constituents are recognized; genomics, transcriptomics, proteomics, metabolomics, and microbiomics. Recent systematic reviews with high value of evidence have shown that salivary biomarkers analysis can be an excellent primary screening tool for the high-risk cases of oral cancer, and that combining these biomarkers with conventional tools could provide more potent diagnostic values for early detection of oral precancer and cancer.

**Conclusion & Significance:** Combination of multiple biomarker candidates in prompt detection of oral precancer and cancer is preferred to improve accuracy, sensitivity, and reliability. This can bring salivaomics to clinical point-of-care applications. Clinical relevance: The use of salivary biomarkers is beneficial in screening of high-risk cases and is available for practitioners to apply into their clinical practice.

### Biography

Professor Dalia Ghalwash has her expertise in the field of Oral Medicine, Diagnosis and Periodonotology with special interest in the diagnosis and early detection of oral cancer and precancer. She has passion in improving oral health trying to reduce the mortality rate of oral cancer. She has years of experience in scientific research with many national and international publications in her field, in addition to a long teaching experience in huge educational institutions. She is currently the Head of Oral Medicine, Diagnosis and Periodonotology Department and the Chair of Research Ethics Committee of the Faculty of Dentistry, The British University in Egypt.



**Fatma Makkeyah**

The British University in Egypt, Egypt

## **Surface roughness and color stability of lithium disilicate ceramics after polishing with different intraoral polishing systems**

**Purpose:** To investigate the effect of two polishing systems on the surface roughness and color stability of lithium disilicate ceramic.

**Materials and Methods:** Forty disc-shaped lithium disilicate samples were constructed and cemented into a cavity prepared onto the labial surface of freshly extracted bovine teeth; The samples were divided into four groups (10 samples per group); **C:** Control, **SS:** Scaling only, **SE:** Scaling followed by polishing using Eve Diapro lithium disilicate polishers, **SD:** Scaling followed by polishing using Diatech ShapeGuard ceramic polishing plus kit. The surface roughness was measured before scaling, after scaling and finally after the polishing procedure. The color parameters were measured before and after the staining procedures using VITA Easyshade Advance 4.0 according to the CIE L\*a\*b\* color order system.

**Results:** Both polishing systems significantly decreased the surface roughness of the disilicate ceramic and were accompanied by a significant decrease in the color change. However, the color change in the polished group was significantly higher than that of the control glazed group.

**Conclusion:** The surface roughness and color stability of lithium disilicate ceramics can be enhanced by recent polishing systems; however, it shows different topography than the glazed ceramic surface.

### **Biography**

Fatma Makkeyah is a lecturer of Fixed Prosthodontics at the Faculty of Dentistry, The British University in Egypt. She has experience in dentistry since graduation from the Faculty of Oral and Dental Medicine, Cairo University in 2002. She has been working in dental education for more than 15 years starting as a demonstrator of fixed prosthodontics at the Faculty of Dentistry, Misr University for Science and Technology, then as an assistant lecturer of fixed prosthodontics at the Faculty of Dentistry, The British University in Egypt.



### **Nermeen Nagi<sup>1\*</sup> and Bourauel C<sup>2</sup>**

<sup>1</sup>Fixed Prosthodontics Department, Faculty of Dentistry/Fayoum University, Fayoum, Egypt

<sup>2</sup>Department of Oral Technology, Centre for Dental and Oral Medicine, University Hospital Bonn, University of Bonn, Bonn, Germany

## **Comparative evaluation of fracture resistance and internal fit of endocrowns using lithium disilicate and polyether ether ketone materials - An in vitro study**

**Statement of the problem:** An endocrown is a novel type of onlay. Nevertheless, dentists have not still fully understood the clinical implications of the selection of endocrown material. Inherited brittleness of etchable ceramics containing glass claimed to be the major limitation of these materials as it leads to catastrophic fracture and excessive wear on opposing natural teeth. To overcome this problem the use of material that has potential of stress distribution as PEEK. Yet clinical studies are needed to evaluate their mechanical properties and clinical performance.

**Purpose:** This study compared the fracture strength and the internal fit of PEEK endocrowns to that of lithium disilicate endocrowns with different occlusal preparation designs.

**Materials and methods:** 32 endocrowns were fabricated on prepared mandibular molars and divided into 2 main groups (N=16) according to the material. Group A: lithium disilicate endocrowns and Group B: PEEK endocrowns. Each group was further subdivided into 2 subgroups (N=8) according to the occlusal preparation design (full occlusal coverage and partial occlusal coverage endocrowns). Samples were evaluated using  $\mu$ CT imaging with voxel size 6  $\mu$ m to evaluate internal fit and universal testing machine was used to evaluate fracture resistance. Data was collected, tabulated and statistically analyzed using a commercially available software (SPSS Chicago, IL, USA). Numerical data was described as mean and standard deviation and compared using ANOVA test. The level of significance was set at  $P \leq 0.05$ .

**Results:** PEEK endocrowns showed remarkable results compared to lithium disilicates endocrowns.

**Clinical significance:** Evaluation of mechanical properties and clinical performance of PEEK endocrowns as an alternative restorative material to overcome the limitations of widely used etchable glass ceramics in restoration of endodontically treated teeth.

### **Audience Take Away Notes**

- Introducing a use of PEEK as restoration material for endodontically treated teeth
- The adaptation and fit on the restoration on tooth structure
- Introduction of more conservative designs of endocrown restoration
- Our results will help other researchers to investigate more about the other properties of the PEEK and help in modifying its properties

### **Biography**

Dr. Nermeen Nagi studied dentistry at Ain Shams University, Egypt, and graduated with an MS in 2006. She then joined the research group of Prof. Dr. Tarek Salah at the Fixed Prosthodontics Department, Faculty of Dentistry, Ain Shams University. She received her M.Sc. Degree in 2013 and her Ph.D. Degree in 2018 at the same institution. She also received a postdoctoral fellowship for 3 months supervised by Prof. Dr. Christoph Bourauel at the Department of Oral Technology, Centre for Dental and Oral Medicine at the University Hospital Bonn, the University of Bonn funded by the FGD. She had an oral presentation at IADR in 2019 in Madrid Spain. She obtained the position of Lecturer of fixed Prosthodontics at the Fixed Prosthodontics Department, Faculty of Dentistry, Fayoum University, Egypt.



**Shirin Modabbernia<sup>1\*</sup>, Bardia Vadiati Saberi<sup>2</sup>**

<sup>1</sup>Department of Oral and Maxillofacial Pathology, Guilan University of Medical Sciences

<sup>2</sup>Department of Periodontology, Guilan University of Medical Sciences

## **A rare case of gastrointestinal stromal tumor with maxillary metastasis: A case report and literature review**

**I**n this presentation, we will talk about a 69-year-old woman who was referred for dental restoration. In the posterior region of the maxilla, a painless, bleeding-free swelling was discovered. There was no previous history of cancer in the patient's family. The panoramic view of the lesion demonstrated an irregular erosion of bone. Incisional biopsy represented a maxillary adenocarcinoma of metastatic origin. Patient was referred to a cancer treatment center for a whole body scan and finally she was diagnosed with a GIST based on the whole body scan and also immunohistochemical staining on the tumor cells. We aim to represent a different case of GIST with maxillary metastasis that in-time diagnosis of a dentist help her become aware of her gastrointestinal cancer.

### **Audience Take Away Notes**

- This study is a rare case which has a lot of information in it. We first report the case and then review other similar cases. Such cases help us be a meticulous dentist as a first-line clinician and help the patient become aware of occult disease if there is any, because some oral cavity lesions are a sign of systemic diseases
- How to face these kinds of problems, how to manage the patient and the design the correct treatment plan are other useful information we will have in presenting our case

### **Biography**

Dr. Modabbernia studied Dentistry at the Shahid Beheshti University of Medical Sciences, Tehran, Iran and graduated as a dentist in 2011. She then started residency of oral and maxillofacial pathology and graduated 2014. She is now an assistant professor at Guilan University of Medical Sciences. She is also a member of Guilan dental research center and also a scientific reviewer of 3DJ journal of Dentistry. She is now studying on malignant and premalignant lesions of the oral cavity and also odontogenic lesions.



**Hassan M. Negm<sup>1\*</sup>, Mohsen H. Abi-Elhassan<sup>2</sup>, Ibrahim Hussein Ahmed<sup>3</sup>, Ahmed F. Abo Elezz<sup>4</sup>, Wafaa Elhossary<sup>5</sup>**

<sup>1</sup>Department of Conservative Dentistry, Faculty of Dentistry, 6th October University, Egypt

<sup>2</sup>Department of Conservative Dentistry, Faculty of Oral and Dental Medicine, Cairo University; Vice-dean of Environmental Affairs and Community development-6th October University, Egypt

<sup>3</sup>Ph.D., Professor of Surgery, Anaesthesiology and Radiology, Department of Surgery, Anesthesiology and Radiology, Faculty of Veterinary Medicine, Suez Canal University, Ismailia, Egypt

<sup>4</sup>Ph.D., Assistant professor of Operative Dentistry, Faculty of Dentistry, Suez Canal University, Ismailia, Egypt

<sup>5</sup>Ph.D., Lecturer of Oral Pathology, Faculty of Dentistry, Suez Canal University Ismailia, Egypt

## **Appraisal of pulp reaction of nanoclay modified adhesive systems by bulk fill resin composite**

Current research was performed to evaluate the pulp response in deep dentine cavities in permanent posterior teeth of dogs. **Materials and Methods:** A total of six adult mongrel dogs weighing an average of 10 kg, aged between 12 to 18 months, were used. All dogs were systemically healthy and showed no clinical signs of dental disorder. The study was done at Veterinary Hospital (Abbasia). Dogs were undergoing general anaesthesia through intravenous injection of sodium pentobarbital; a rubber dam was fixed in place; cavities were prepared in labial surface of each tooth. Cavities were divided into three groups according to the restorative materials used: Group1: Prime & Bond universal TM adhesive & Bulk fill material with Flowable consistency (Control Group). Group 2: Dellite®43B modified Adhesive system & Bulk fill material with Flowable consistency. Group 3: Dellite®LVF modified Adhesive system & Bulk fill material with a Flowable consistency. Each group was further subdivided into three equal subgroups at different time intervals: after one week, 30 and 60 days. The study design was performed to obtain a total of 90 dogs' teeth, the number of the samples for each testing material was n=7, and the total number of the samples in the six dogs for each material were n=42. From every 42 teeth in each group, the best 30 teeth were selected to be examined. **Results and Conclusion:** The result revealed that whether on different time intervals of 7, 30 and 60 days, there was no significant difference in pulp response of the conventional prime and bond adhesive system and Dellite 43 modified adhesive but there was a significant difference between the two mentioned materials and Dellite LVF modified adhesive system. Organic modified montmorillonite adhesive produced favourable pulp response and seemed to be a promising biocompatible material comparable to conventional adhesive.

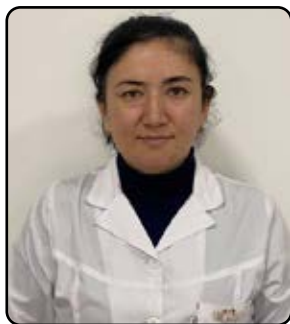
### **Audience Take Away Notes**

- Organic modified montmorillonite adhesive produced favourable pulp response
- Organic modified montmorillonite adhesive is a promising biocompatible material comparable to conventional adhesive
- There is no significant difference between pulp response of the conventional prime and bond adhesive system and Dellite 43 modified adhesive
- There was a significant difference between the two mentioned materials and Dellite LVF modified adhesive system



**Biography**

Dr. Hassan M. Negm Studied dental sciences in 6 October University, 6 October, Giza, Egypt and graduated as B.D.S in 2005. He then joined the research group of prof. Dr. Prof. Dr. Mohsen Hussien Abi-Elhassan, Professor of Conservative Dentistry, Faculty of Oral and Dental Medicine, Cairo University, Vice dean of Environmental Affairs and Community development- October 6th university. Furthermore, he then studied the Master degree M.D.S from Cairo University, Cairo, Egypt in 2013. In 2018, he joined research groups in Faculty of Dentistry and Faculty of Veterinary Medicine, Suez Canal University, Ismailia, Egypt. He joined the doctoral degree program in 2018 in Faculty of Dentistry Suez Canal University (Dr. Ahmed Abo-Elezz, and Dr. Wafaa Elhossary, in collaboration with Faculty of Veterinary Medicine (Prof.Dr. Ibrahim Hussein Ahmed). He received his PhD degree in 2022 at the same institution (Faculty of Dentistry, Suez Canal University, Ismailia, Egypt).



**Jabborova Feruza**

Bukhara State Medical University, Uzbekistan

## **Features of local mucosal immunity of the oral cavity and systemic immunity in persons with severe COVID-19**

With the latest developments in the COVID-19 pandemic, current research shows that coronavirus infection enters human cells through the angiotensin-converting enzyme receptor 2 (ACE2) through scRNA-seq data analysis. In the course of large-scale studies, organs at risk and vulnerable to infection with the coronavirus (SARS-CoV-2) of severe acute respiratory syndrome have been identified. Therefore, cells with distribution of ACE2 receptors can become host cells for the virus and cause an inflammatory response in related organs and tissues, such as the mucous membrane of the tongue and salivary glands. The interaction of SARS-CoV-2 with ACE2 receptors can also impair the sensitivity of taste buds, which can cause dysfunctional taste reactions.

The available data have not yet identified an effective and safe pharmacological therapy against COVID-19, and the available potential antiviral drugs lead to adverse reactions. Therefore, acute COVID-19 infection and associated therapeutic interventions can contribute to adverse oral health outcomes. Oral signs and symptoms associated with COVID-19 are known to include taste disturbances, nonspecific mouth ulcers, desquamative gingivitis, petechiae, and coinfections such as candidiasis. However, it is still not clear whether these manifestations can be a true clinical picture resulting from direct infection with SARS-CoV-2, or systemic consequences, given the possibility of coinfections, weakening of local immune reactivity and adverse reactions to therapy. Since the prevalence of clinical manifestations is still not fully understood, the spectrum of manifestations of COVID-19 in the oral cavity is considered a subject of wide and current interest, therefore, a live systematic review approach is needed that will allow continuous monitoring of recently published studies through periodic searches to include new relevant information, especially on a topic that is constantly being updated in the context of COVID-19.

In recent years, much attention has been paid not to the study of cellular and humoral factors of systemic immunity, but most of all the emphasis is on the factors of local immunity, especially depending on the clinical features of the course of the disease, which gives a broader and more correct understanding of changes in local immunity, especially against the background of the course of infectious pathology. This paper will present the main immunological parameters of local immunity and blood, which are important in the immunopathogenesis and course of respiratory infectious pathology associated with the course of COVID-19. The factors of innate immunity will be investigated. These factors include such values as humoral factors: cytokines, interferons, immunoglobulins and circulating immune complexes of various sizes. It should be noted that the listed parameters of immunity are nonspecific, i.e. universal factors, the study of which against the background of a specific nosology and comparison of the results obtained with the clinical manifestations of the disease makes these factors specific and unique, revealing the mechanisms of immunopathogenesis of the course of an acute infectious disease, since it is the above parameters of the immune system that accompany all processes of immunopathogenesis, the development of the disease, its progression and the outcome.

**Audience Take Away Notes**

- This diagnostic method makes it possible to use COVID-19 to determine the severity of the infection
- It allows for the evaluation of humoral immunity status in patients
- The establishment of reliable suppression of the main interferons responsible for the formation of antiviral protection in persons with a severe current COVID-19 serves as a marker of adverse prediction of the outcome of mucous membrane damage in this category of patients

**Biography**

Dr. Feruza studied Dentistry at the Bukhara State Medical Institute, Uzbekistan, and graduated as a therapeutic dentist in 2006. She did the research with Prof. Ismailova A. A Head of the Laboratory of Fundamental Immunology, Institute of Immunology and Human Genomics of the Academy of Sciences of the Republic of Uzbekistan, Tashkent, Uzbekistan. And she received her Ph.D. degree in 2022 at the same institution. She has published more than 15 research articles in international journals. She has also participated in International Conferences in South Korea, Austria, and Turkey.

27-29 APRIL

DAY 02

KEYNOTE FORUM

7<sup>TH</sup> EDITION OF  
INTERNATIONAL CONFERENCE ON

# DENTISTRY AND ORAL HEALTH

## The dynamic change in philosophy in the formation of the dental biofilm and the rationale of debridement: An overview

The rationale for the treatment and management of periodontal disease has varied over the last three to four decades and as such the clinician should be aware of these changes to manage the condition effectively. For example, the recognition that the modification and/or removal of the dental biofilm on the tooth surface is key to reducing the impact of the oral microflora on both the hard and soft tissues of the mouth rather than concentrate on the concept of calculus removal and planned removal of so-called 'diseased' cementum of the root to achieve success. The understanding of the role of the oral flora has also changed particularly with the emergence of the key pathogen hypothesis and how this concept has impacted on how the condition is managed. The improvement in instrumentation and surgical techniques together with the adjunctive use of antimicrobials in both non-surgical and surgical procedures has also impacted on our treatment philosophy. The aim of this presentation, therefore, is to provide an overview on the dynamic changes in philosophy in the treatment and management of periodontal disease.

### Audience Take Away Notes

- To provide an overview of the dynamic shift in the understanding and management of periodontal disease
- To recognize that the role of the oral flora has changed, particularly with the emergence of the key pathogen hypothesis
- To assess how these changes have impacted on our treatment of periodontal disease in daily practice



**David G Gillam\*, Kitichai Janaphan, Robert G Hill**

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

### Biography

I graduated from Edinburgh Dental School in 1977 and have been involved in Dentistry over the last 45 years. I have worked in both clinical practice and in University Dental Hospitals as well as in Industry (1998-2001) initially with SmithKline Beecham and subsequently with Block Drug Company. From 2003 to 2008, I worked with a Clinical Research Organization as a Research Dentist, and I was previously a full-time Clinical Reader (Associate Professor) in Translational Research in Relation to Dentistry at the Bart's and the London School of Medicine and Dentistry QMUL in London (2009-2022). Currently I am a part-time Reader at QMUL. My main research interest is in Periodontology in particular, the Management of Dentine Hypersensitivity, although I have developed an interest in the development of dental materials for both professional and consumer use. I have published over 100 papers on numerous dental topics as well as contributing to several books as Editor and several book chapters as a contributor.

## Prevention of periodontal diseases: Shifting the focus

Oral diseases (caries and periodontal diseases, such as gingivitis and periodontitis) are now recognized as being both an epidemic and one of the most important public health problems in the world. Periodontal diseases are considered a worldwide public health problem, owing to their high prevalence in developed and developing countries. Periodontitis is a chronic Non-Communicable Disease (NCD) that impacts oral health-related quality of life as it may lead to tooth loss and represents a major public health problem. The new S3 periodontal treatment guidelines have highlighted the importance on prevention and good maintenance prior to carrying out periodontal surgical procedures. Clinical studies well document that patients can prevent tooth decay and periodontal disease when engaged in good oral hygiene practices. However, the continued high global prevalence of these oral diseases, with accompanying significant public health burdens, demonstrates that tooth brushing alone for most people may be insufficient intervention to achieve and maintain good oral health. This presentation will focus on periodontal preventive strategies one in which a clinician can monitor his/her patient for optimal health.

### Audience Take Away Notes

- Importance of focusing on prevention of periodontal diseases
- Incorporation of Prevention tools in daily practice
- Courses which can be taken to master this philosophy
- An important aspect to motivate patients prior to periodontal surgery



### Bennete Fernandes

Faculty of Dentistry, SEGi University, Kota Damansara, Selangor, Malaysia

### Biography

Dr. Bennete Fernandes studied Periodontology at the prestigious Rajiv Gandhi University of Health Sciences (RGUHS), Bengaluru, India and completed his Masters in 2004. He has nearly 18 years of academic and clinical experience. He was awarded an honorary PhD degree in 2021 by the International Internship University (IIU). He is a member of at least 50 different organizations worldwide. After 11 years of working in India with his final stint as a professor at Mangalore, India, he shifted to Malaysia and is currently attached to SEGi University from the past 6 years. He has published nearly 40 research articles in peer reviewed and indexed journals.



## A different approach to the conventional reconstruction techniques of the middle third of the face with microvascularized fibula flap

**Introduction:** Tumors that reach the face make us more sensitized by their destruction. 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. Reconstructions with microvascularized fibula retail are a routine in our institution, so this makes us seek alternatives to give better comfort to patients covering functionality and aesthetic issues.

**Objective:** To show reconstructions with microvascularized fibula retail in large defects in mandible and new technique for the zygomatic-maxilla complex reconstruction and orbital floor, due to the difficulty in rotating the soft tissues, pedicle.

**Method:** 1-For patients whom require complementary therapy with radiotherapy, there is a security time to exercise or indicate radiation treatment. With the variables of more contact surface area between the segments, which facilitates bone neoformation and retail stability, thus decreasing the chance of losses of osseous segments or necrosis. 2- (New technique) After harvesting The fibula free flap in the standard fashion, differentiated osteotomies, modeling and arrangement of the fibular bone segments are performed in the receptor site of the middle third of the face.

**Conclusion:** These variables in the reconstruction technique of the microvascularized fibular retail have raised a satisfactory result in aesthetics and function. The new technique presented has the advantage in reconstruction of requiring only one flap, promoting the resolution of the technical difficulties of the middle third of the face.



### Laurindo Moacir Sassi

Cancer Center Erasto Gaertner  
and Evangelical Mackenzie  
University Hospital, Brazil

#### Biography

Prof. Dr. Laurindo Moacir Sassi - Oral & Maxillofacial Surgery; PhD; MSc; DDS; Department's Chief Oral and Maxillofacial Surgery (Chief in Chair Oral and Maxillofacial Surgery). Erasto Gaertner Cancer Center - Curitiba - PR-Brazil; Residence Coordinator of (CTBMF) - Erasto Gaertner Cancer Center; Member of the (CTBMF) Service - Department of Otorhinolaryngology, Hospital University Evangelico Mackenzie-Pr; 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 Pratico para Desenvolvimento de Projetos de Pesquisa e Teses". Publishing company: Santos. 2011; Book Author: "25 anos de prevencao de cancer bucal no Parana: Hospital Erasto Gaertner (1989 a 2013)" Publishing company: Appris. 2013.

27-29 APRIL

DAY 02

**SPEAKERS**

7<sup>TH</sup> EDITION OF  
INTERNATIONAL CONFERENCE ON

# DENTISTRY AND ORAL HEALTH



**Veena Naik<sup>1\*</sup>, Saurabh Prakash<sup>2</sup>**

<sup>1</sup>Dept of Oral Medicine and Radiology, Aimst University, Semeling, Malaysia 08100

<sup>2</sup>Dept of Orthodontics, Aimst University, Semeling, Malaysia 08100

## **Frequency of recommending cone beam computed tomography in comparison to panoramic radiograph, while diagnosing a pathology/ status of vital structures around mandibular impacted third molar**

**Objective:** This study assesses the quantity and quality of reliability of both conventional and Cone Beam Computed Tomography (CBCT) in evaluating External Root Resorption (ERR) and proximity of Inferior Alveolar Canal (IAC) around impacted mandibular third molars and also the practicability to advise CBCT as the first radiographic examination in every patient with above pathology.

**Methodology:** A prospective cross sectional study was conducted with a sample of 73 individuals, aged between 18 and 40 years, irrespective of their sex. Digital Panoramic Radiograph (PAN) and CBCT were carried out for individuals with mandibular impacted third molars, which were evaluated by three observers independently for ERR and relation of impacted teeth with Inferior Alveolar Nerve (IAN) canal (resorption of IAN cortical plate, impingement, and approximation). The data was analyzed by Kappa test and the PAN and CBCT findings were compared using Wilcoxon signed rank test.

**Conclusion:** Thus, we conclude that two dimensional (2D) radiographs are the first choice of diagnostic radiographs, even though the CBCT is accurate in displaying the pathology; however, the decision to advise CBCT image should depend on whether the information from CBCT changes the surgeon's diagnosis and treatment planning.

### **Audience Take Away Notes**

- Advising CBCT for every patient is not feasible, hence understanding the accuracy of 2D and 3D imaging is necessary
- Clinicians will have a better understanding as to when to advise for CBCT
- The current research can be used by our faculty could use to expand their research or in teaching

### **Biography**

Dr. Veena Naik graduated in Bachelor of Dental Surgery (BDS) in the year 2005 from SDM College of Dental Sciences, India. Received Master of Dental Surgery (MDS) degree in 2011 from Bapuji Dental College & Hospital, India in the specialty Oral Medicine and Maxillofacial Radiology. Since 2014, she has been with Department of Oral Medicine and Radiology in AIMST University, Semeling, Malaysia, where she was a Senior Lecturer and became Associate Professor in 2018. Her current research interest includes TMJ Disorders and Cone beam CT imaging.

Dr. Veena is a member of The American Academy of Oral and Maxillofacial Radiology, Asian Academy of Oral and Maxillofacial Radiology and life member of Indian Academy of Oral Medicine and Radiology. Community involvement like Anti-tobacco campaign, Treatment and awareness camps in central jail and Oral Health Awareness Campaign were accomplished in 2005, 2014 -2020. Apart from academic credentials, she was a residential school girl, which makes her highly organized and well proficient with extracurricular activities like dancing, reading to being a good orator.

**Fay Goldstep**

International Speaker, Canada

## **Periodontal Inflammation: The LOCAL/SYSTEMIC link demystified**

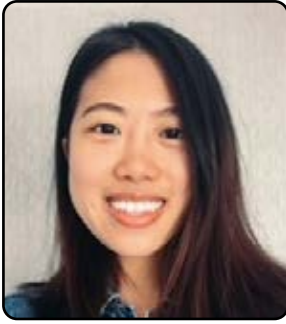
**P**eriodontal disease is chronic inflammation unchecked. Why does this occur? What is the sequence? This program will explain and simplify the downward spiral of periodontal disease from beneficial acute inflammatory response to chronic unresolved inflammation with its direct impact on systemic health.

### **Audience Take Away Notes**

- Achieve a clear and simple understanding of the progression of periodontal disease from a clinical, cellular, and biochemical level
- Discover the local/systemic link pathway of action between periodontal disease and systemic disease
- Learn about the relationship of periodontal disease to other chronic inflammatory diseases of aging
- See what non-invasive treatment options can break the link
- Learn about a simple new chair side test to measure oral inflammation and evaluate treatment success

### **Biography**

Dr. Fay Goldstep has served on the teaching faculties of the Post-graduate Programs in Esthetic Dentistry at SUNY Buffalo, the Universities of Florida (Gainesville), Minnesota (Minneapolis), and has been an ADA Seminar Series speaker. She has written and lectured nationally and internationally on Proactive/Minimal Intervention Dentistry, Oral Inflammation, Soft-Tissue Lasers, Electronic Caries Detection, Bioactive Dental Materials, and Innovations in Hygiene. Dr. Goldstep has been a contributing author to four textbooks and has published more than 100 articles. She is a Fellow of the American College of Dentists, International Academy for Dental-Facial Esthetics, American Society for Dental Aesthetics and the Academy of Dentistry International. She sits on the editorial boards of Oral Health Journal (healing/preventive dentistry), Dental Tribune US Edition, Dental Asia and REALITY. She has been listed as one of the leaders in continuing education by Dentistry Today since 2002.

**Audrey Chew**

Paediatric Department, Charles Clifford Dental Hospital, 76 Wellesley Road, Broomhall, Sheffield, S10 2SZ, United Kingdom

**Langerhans cell histiocytosis in a 12 year old – A case presentation**

This presentation will aim to document Langerhans Cell Histiocytosis (LCH) in a 12-year-old patient. This 12-year-old girl was referred to our department with pain and swelling in the right mandible region extending into the right forearm. In this presentation, I will aim to discuss the sequence of patient journey including the referral process, initial presentation, radiological and pathological investigations and lastly, the treatment provided. I will also discuss, in broad terms, the epidemiology, types, typical presentations and prognosis of Langerhans Cell Histiocytosis.

**Audience Take Away Notes**

- Understand that Langerhans Cell Histiocytosis is a rare disorder
- Understand the epidemiology and prevalence of Langerhans Cell Histiocytosis
- Identify dental abnormalities and refer patients to appropriate secondary care within a timely manner
- Identify Langerhans Cell Histiocytosis as a differential diagnosis of mandibular radiolucency
- Classify types of Langerhans Cell Histiocytosis and understand what treatments are available and the survival rates

**Biography**

Dr. Chew studied Bachelor of Dental Surgery at Queens University, Belfast in Northern Ireland and graduated in 2017. She then worked as a general dental practitioner in several places including Manchester, Halifax and Bradford in the United Kingdom. After several years in practice, she started her core training in Oral and Maxillofacial Surgery at Pinderfields Hospital and is currently working within the Paediatric department at Charles Clifford Dental Hospital.



### **Dr. Kiran Jadhav<sup>1\*</sup>, Dr. Vandana Shah<sup>2</sup>, Dr. Ghanshyam Parmar<sup>3</sup>**

<sup>1</sup>Professor, Dept. of Oral and Maxillofacial Pathology, Vasant Dada Patil Dental College and Hospital, Affiliated to Maharashtra University of Health Sciences, Sangli, and Maharashtra, India

<sup>2</sup>Professor and Head, Dept. of Oral Pathology and Microbiology, KM Shah Dental College and Hospital, Affiliated to Sumandeep Vidyapeeth, Vadodara, Gujarat, India

<sup>3</sup>Professors, Dept. of Pharmacy, Affiliated to Sumandeep Vidyapeeth, Vadodara, and Gujarat, India

## **Assessment of salivary and tumor tissue miRNA 21 as marker for prediction of cervical lymph node metastasis in patients with oral squamous cell carcinoma: An observational study**

**Background:** The miR-21 targets those genes which are associated with metastatic process in OSCC. The aim of the study was to evaluate the diagnostic accuracy of miR-21 for assessment of cervical lymph node metastasis in patients with OSCC.

**Method:** Unstimulated whole saliva and tumor tissue was obtained from clinically suspected patients of OSCC. The assessment of cervical lymph node metastasis was done prior to surgery using imaging scans and post surgically confirmed by histopathological examination. MiR-21 expression was evaluated using Real-time PCR. The data was statistically analysed for correlation analysis, cutoff values, sensitivity and specificity. The Kappa statistics was applied, to assess the degree of agreement between the lymph node metastasis and miR-21 expression.

**Results:** miR-21 expression showed a statistically significant correlation with cervical lymph node metastasis, with a diagnostic accuracy of 65%-71.54% in saliva and 69%-81.54% in tumor tissue. The cutoff value of miR-21-5p and miR-21-3p was 2.32 ct and 2.16 ct for saliva and 1.80 ct and 0.89 ct for tumor tissue. In the present study it was observed that when the miR-21 expression is above the cut off score the chances of lymph node metastasis are higher. Very good agreement was observed between tumor tissue miR-21-3p and cervical lymph node metastasis, with a specificity of 80.60% and a sensitivity of 82.40%.

**Conclusion:** miR-21 expression in saliva and tumor tissue of OSCC patients showed high diagnostic accuracy for assessment of cervical lymph node metastasis. It can be used as an alternative for assessment of cervical lymph node metastasis before surgery.

### **Audience Take Away Notes**

- The expression of miRNA 21 can be used as an alternative method for assessment of Lymph node metastasis using saliva or tumor tissue
- This will help to overcome the limitations of present use of radioimaging methods for same purpose
- This study help to establish the link between miRNA 21 and Lymph node metastasis

### **Biography**

Dr. Kiran Jadhav studied Dentistry at KLE'S Institute of Dental Sciences, Rajiv Gandhi University of Health Sciences, and Bangalore, India and graduated as BDS in 2004. He then joined Oral and Maxillofacial Pathology at Bapuji Dental College and Hospital, Rajiv Gandhi University of Health Sciences, Bangalore, India and post graduated as MDS in 2010. He has obtained PhD from Sumandeep Vidyapeeth, Vadodara, and Gujarat, India. Presently he is working as Professor at Vasant Dada Patil Dental College and Hospital, Maharashtra University of Health Sciences, Sangli, Maharashtra, India. He has total teaching experience of twelve years and He has published 30 papers in scientific journals.





**Mahesh K P**

Jss Dental College and Hospital, India

## **Biopsychosocial model for pain management in post cancer therapy patients - A evaluation study**

**O**ncological professionals have spent the last 20 years attempting to close gaps in the psychosocial care of cancer survivors, and have identified the use of biopsychosocial assessment tools as valuable means of improving coordination of integrated treatment efforts between medical and mental healthcare providers. Biopsychosocial assessment tools aim to identify significant leverage points in treatment planning for biological, social, and psychological determinants of health. Biopsychosocial models are particularly appropriate for cancer survivors, as the closely intertwined biomedical and psychosocial impacts of cancer may not be appropriately understood if singularly assessed. Measures of quality of life (QoL) remain the most widely used biopsychosocial assessment tools in cancer care theoretically; QoL is a concept closely associated with well-being and wellness and is intended to be a holistic and subjective construct. The biopsychosocial model is a helpful way to comprehensively approach the conceptualization and treatment of pain in cancer patients at all stages of the disease process. We currently have an established base of research on the importance of biopsychosocial model in cancer pain. Our ability to treat patients with cancer pain effectively will improve as we gain a better understanding of which treatments work for which patients. This study assesses the importance of integrating the biopsychosocial model for cancer patient. Here biological components are managed by low level lasers and psychosocial aspects through palliative care holistic approach by the model is considered for outcome. Post oral cancer treated patients are assessed for biological, psychological factors which are the main contributors for pain. Through the model we have understood various pain causing agents and tried to manage them. Pain was considered as parameter for assessment with clinical assessment. A pain value (vas) is subjected to statistical analysis and results are interpreted for conclusion.

### **Biography**

Mahesh has a B.D.S. from the Yenepoya Dental College in Manglore in 2000 and an M.D.S. from the SDM Dental College in Dharwad in 2006, as well as 16 years of professional experience at the JSS Dental College and Hospital in Jssaher. Specialty: Orofacial pain and oral oncology. He had written and edited three text books, issued an Indian patent, and had been published in 33 national and international periodicals. He completed four research-funded projects. He was responsible for the institution's radiation safety, ISO 9001: 2015 QMS-C, and Sig leader for orofacial pain. He was a life member of IAOMR, a previous president of IDA Mysore, and the vice president of IAOMR's Karnataka state branch. In the education sector, he was given Asia Pacific Excellence Award in 2021.



**Rehana Younus Lakhani**

Dentistry & Aesthetics, Pakistan

## **Roll of tobacco in dentistry**

One of the leading causes of oral cancer and lungs disease is TOBACCO. There are multiple causes behind which affect direct or indirect in your body via oral cavity. As a Dentist, in my research, 6 patients out of 10 patients are smokers with dad who are suffering oral cancer or same degree any other disease due to smoking.

### **Biography**

Dr. Rehana Younus Lakhani is a Senior Dentist, she is in this field since 1993, She completed, Higher Dip in Implant from Germany, Dr in. Medicine from Sri Lanka, and different dental courses from Pakistan, USA, Overworked as a Dentist, Medical Director, Head of Dental Department in Pakistan, and UAE. Dental research, Cosmetic Dentistry, and Laser Dentistry is the work of choice. Dr. Rehana represented Pakistan as an International speaker in many countries like, Singapore, South Africa etc. She is also work as a dental content writer in many international online Medical and dental Journals.



**Eduardo D Rubio<sup>1\*</sup>, Mariano Mombru<sup>2</sup>**

<sup>1</sup>Chairman of Oral and Maxillofacial Post graduated Program, Universidad Catolica Argentina

<sup>2</sup>Adjunct professor of Post Graduated Program, Universidad Catolica Argentina

## **Sagittal split ostotomy for deeply pathology of the mandible**

During the presentation we'll be showing a very practical approach to access of the very deeply pathology of the mandible. We mentioned pathology because sometimes third molars are impacted, but others, the presence the impacted teeth is associated with big cyst or other entities, and put the mandible in serious danger of fracture. The oral and maxillofacial surgeon is able to perform a sagittal split osteotomy as one of the most frequent procedures in orthognathic surgery. That ability can be used in order to avoid a big bone lost as when a traditional approach is performed. We'll be analysing pros and cons of both types of procedures.

### **Audience Take Away Notes**

- You'll be able to categorize the risk of a pathological fracture of the mandible
- You'll have the possibility of knowing an alternative approach to the deep of the mandible
- You'll be able to establish the possibility of using this method and to refer the patient

### **Biography**

Dr. Eduardo Rubio is graduated in the facultad de Odontología. University of Buenos Aires in 1980. He obtained the Ph. D at the same University on 1983. Completed the residency on Oral and maxillofacial Surgery at the French Hospital in Buenos Aires, he devoted exclusively to the spetiality. Dr. Rubio is Chair of Oral and Maxillofacial Surgery post graduated program at the Universidad Catolica Argentina, as well as Chair of Orla and Maxillofacial Surgery in the Dentistry School at the same University. Dr. Eduardo Rubio and Dr. Mariano Mombru have a private practice dedicated to Orthognathic and reconstructive Surgery in Buenos Aires, Argentina.



**Astrid Kruse Gujer**

TMJ Clinic, Switzerland

## **Treatment algorithm for temporomandibular joint disc displacement**

**T**emporomandibular joint disorders are common and disc displacement is one of the most common intra-articular disorders of our temporomandibular joint. Often this patient group is treated with a splint, but in many cases this does not lead to success. Where are the limitations of non-surgical procedures like physiotherapy or splint therapy? What are the indications for a surgical approach? What are the success factors for a surgical procedure? Besides different clinical cases an algorithm will be presented like we treat patients in our TMJ clinic.

**Bindu Sathyan**

Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka, India

## Remineralizing agents in dentistry

Dental caries has been a public health problem for many decades. Regardless of age, gender, and ethnicity, dental caries, a complex disease, affects a significant portion of the world's population. Dental caries is a continuous process that starts from the level of initial demineralization, progresses to a non-cavitated white spot lesion, and often can cause dentinal involvement, eventually leading to cavitation. Modern dentistry aims to manage white spot lesions non-invasively through remineralization to arrest or revert disease progression. Remineralization is the process of depositing calcium and phosphate ions into crystal voids in demineralized enamel, thus producing net mineral gain. Present-day treatment aims at minimally invasive dentistry by early detection and management in a patient-friendly and minimally invasive manner. My presentation aims to provide in-depth knowledge of the natural phenomenon of enamel demineralization and remineralization while discussing novel remineralizing products aiming to treat them.

### Audience Take Away Notes

- Incorporate remineralizing agents into your daily dental practice
- Materials and methods that prevent dental caries
- Practice preventative dentistry and help patients retain their natural teeth

### Biography

Dr. Bindu Sathyan graduated from Rajiv Gandhi University of Health Sciences with Bachelors in Dental Surgery. She went on to complete her Masters in Conservative Dentistry & Endodontics. She has won several awards as a Dental student. She continues to advance her knowledge of the latest dental techniques every year by regularly attending conferences and advanced educational seminars. She has participated in research and published papers in various journals. Her goal as a dentist is to make her patients feel safe and comfortable while providing them with the care and knowledge they need to make confident decisions about their dental health.

**Claire Dewshi**

Dental Core Trainee, Morriston Hospital, Swansea, Wales

## **Marsupialization of a radicular cyst associated with a root treated lateral incisor before commencement of apical surgery**

This presentation will document the referral, assessment, planning and procedure to reduce the size of a cyst associated with the patient's root filled upper left lateral incisor. Due to the nature of his presentation, immediate treatment with traditional surgical endodontics would have compromised not only the tooth in question, but also the adjacent dentition as the radiolucency and evident bony destruction extended to teeth 21 and 23. Due to this added complexity, marsupialization was attempted to shrink the existing lesion and allow for bony infill as much as possible, before attempting an apicectomy to remove the cause of infection. I will outline a brief overview of apical disease and cyst aetiology, the reasons why these lesions expand as they do, and differential diagnoses which should be considered at the assessment appointment. I will also establish what the patient needs to be aware of before they commit to marsupialization, and the medico-legal protocol for documenting this consent process (including photography). The advantages and disadvantages of this technique will be discussed, alongside alternative treatment options for the patient and the necessity to be critical with case selection when conducting treatment of this type. I will also briefly touch on the materials used and the rationale behind this, as well as the follow up procedure, and what should be noted at review appointments including favorable and non-favorable outcomes for this treatment.

### **Audience Take Away Notes**

- This presentation will give the audience an opportunity to learn how marsupialization can be used for cases where immediate treatment with apicectomy could compromise the affected tooth and the adjacent dentition
- It will refresh member's knowledge of oral disease and pathology, whilst linking it to practical management of these conditions
- It will critically analyze the procedure carried out and show regions which could be explored in the future

### **Biography**

Claire Dewshi graduated from King's College London, England, in 2019 and continued to pursue further training years in secondary care following Foundation Training in South-West London. Having worked in a Maxillo-facial unit in Sussex and then a Restorative Dental Unit in Swansea, Claire has had the opportunity to see how head and neck cancer patients are treated surgically, and subsequently restored dentally under the care of a multidisciplinary team. She has a passion for dental education and mentorship which has led her to becoming involved with dental charities and widening participation groups to improve access to dental schools.





### **Adithi Rao**

Orthodontics and Dentofacial Orthopedics, KLE VK Institute of dental sciences, KAHER, Belagavi, Karnataka, India

## **Orthodontic diagnosis through camera lens**

**A** beautiful smile enhances self-esteem and also improves quality of life by providing physical and mental health benefits.

The success of orthodontic treatment in view of patients is mainly owing to the esthetic outcome of the treatment. As orthodontic treatment is primarily driven by an objective of procuring a beautiful smile, digital photography has become an integral part of diagnostic aids.

Photographs should be part of any comprehensive treatment plan and can be used in diagnosis, education and motivation for the patient, case presentation, documentation, laboratory communication, insurance submissions, public relations and marketing.

Smile analysis allows orthodontists to recognize positive and negative aspects in patient's smile. Based on the type of malocclusion, facial pattern, and mechanics used, orthodontic treatment can either be beneficial or harmful to smile esthetics. Smile analysis thus guides the orthodontist to select the appropriate line of treatment.

Recent advances in technology have made it possible to capture the dynamic components of smile better through videography than with static photography. We conducted a research to capture, analyse and to measure the parameters posed and unposed smile through video clips and for studying the dynamics of speech in Angle's Class I malocclusion patients. This observational study revealed that the smile parameters varied greatly amongst posed and unposed smile group and hence it is important to consider dynamic smile for diagnosis and treatment planning. Also the display of dentition during speech is an important indicator of aesthetics required to render the best orthodontic treatment.

### **Audience Take Away Notes**

- The information obtained from the presentation can be used as a guideline for the diagnosis and comprehensive treatment planning in all orthodontic cases
- This research will provide opportunity for other researchers to conduct further studies

### **Biography**

Dr. Adithi Rao studied dentistry at SDM College of dental sciences, Dharwad under RGUHS University, Bangalore and graduated as BDS in 2014. She completed her post graduation (MDS) from KLE VK Institute of dental sciences, Belagavi under KAHER University, and Belagavi in 2018. Presently she is working as Senior lecturer in KLE VK Institute of dental sciences, Belagavi. She has published papers and authored textbooks in reputed journals/publishers and has been serving as a reviewer in journals of repute. She has a sound clinical and academic knowledge with great interest in research.



**Marco Annunziata\*, Gennaro Cecoro, Luigi Guida**

Multidisciplinary Department of Medical-Surgical and dental Specialties,  
University of Campania Luigi Vanvitelli, Naples, Italy

## **Dental implant treatment in periodontitis patients: Risk factors and clinical indications**

Implant therapy has undergone an exponential increase in the last decades, being now considered the main rehabilitative option for edentulism. In periodontal patients implant treatment deserves particular attention, both in terms of execution and in terms of prognosis over time. On one side, in fact, periodontitis represents the main cause of tooth loss in the adult population, so that many of the implants inserted today are in substitution of teeth lost for periodontal causes. On the other side, however, periodontitis causes, in addition to tooth loss, also tissue deficits that make implant planning and execution in such sites considerably more complex, from both a functional and aesthetic point of view. Furthermore, untreated periodontitis is an absolute contraindication for implant therapy and, also after periodontal therapy, history of periodontitis has been associated with an increased risk of complications and implant loss in the medium-long term. The aim of this presentation is to review the most recent literature concerning the influence of the history of periodontitis on implant outcomes over time, with a particular attention on the role played by factors such as poor oral hygiene, smoke habit, and compliance to periodontal supportive therapy, implant surface and stage/grade of periodontitis.

### **Audience Take Away Notes**

- Principles of direct clinical applicability will be discussed and provided to the audience, supported by sound scientific evidence
- The knowledge and the understanding of the most recent scientific evidence on peri-implantitis risk factors will help clinicians to correctly manage implant cases and improve their success and prognosis over time
- Several food for thought are present that could induce further research and teaching activity, e.g. the role of the history of periodontitis and implant surfaces on the maintaining of implant success over time

### **Biography**

Degree in Dentistry “cum laude” in 2002, University of Naples “Federico II”. Ph.D. degree in 2005, Research Fellow from 2006 to 2010, Assistant Professor of Periodontology and Implant ology from 2010 and Associate Professor from 2018, University of Campania Luigi Vanvitelli. Physician Assistant at the Periodontology and Implant ology Unit of from 2011, University Hospital Luigi Vanvitelli. Active Member and past Board member of the Italian Academy of Osseointegration. Author of book chapters and scientific papers on SCIE journals (55 papers, total citations 1110, H-index 21). Main research fields: Innovative materials and protocols in implant dentistry, etiopathogenesis and therapy of periodontitis.



### **Ayesha Fahim**

Associate Professor & Head of department Oral Biology, University College of Dentistry, University of Lahore, Pakistan

## **Use of situational judgment tests for assessing non-cognitive attributes of final year dental students**

**Objective:** Situational Judgment Tests (SJT) have been previously used in the admission process of medical and dental undergraduate programs, but their utilization as an assessment tool is fairly new. The objective of this study was to explore essential non-cognitive attributes of dental graduates. We also aimed to assess the attributes of final year dental students utilizing SJT and later collected participants' reactions on the test.

**Methods:** A mixed-method exploratory sequential study was conducted. One on-one and group discussions were done with Subject Matter Experts (SMEs) to explore the essential attributes of fresh dental graduates. Based on the thematic analysis, 10 SJT items per domain were constructed by one group of SMEs and expert validated by a different group of SMEs and vice versa. The final dental-SJT was piloted online on final year dental students and their perceptions were collected using a five-point Likert scale questionnaire. Descriptive statistics and Cronbach's alpha were calculated for the test.

**Results:** The consultation with SMEs generated three main themes, namely, Conventional skills, Tribal skills, and Occupational skills. The 70-item dental-SJT piloted on 150 final year dental students revealed data were normally distributed. The internal reliability of test was good (0.738). Students scored highest in "management skills" (>70%) and lowest in "professional ethics" (56%) and "diverse experiences" (58%). The overall student perception about the test was good.

**Conclusion:** SJT is an effective tool to assess non-cognitive attributes of dental students. It has an overall positive perception about perceived predictive validity, perceived fairness, face and content validity.

**Keywords:** academic performance, educational assessment, perception, soft skills, workplace

### **Biography**

Dr. Ayesha Fahim studied Bachelors in Dentistry at the University of Health Sciences, Pakistan and moved on to complete her Masters and Ph. D in Oral Biology from University of Malaya, Malaysia. She is currently working as an Associate Professor and Head of the Department Oral Biology in University College of Dentistry, University of Lahore, Pakistan. She is the Chairperson of the Synopsis Review Committee and Director of the Admissions committee in the same institute. Her research interests include cell biology, tooth morphology, public health and medical education and she has published more than 30 research articles in SCI (E) journals.



**Samah S Mehanny**

Department of Oral biology, Professor and Course Director at Galala University, Suize city, Egypt

## Artificial intelligence pervades dentistry

The study of any machine that understands its surroundings and acts in a way that maximizes its chances of successfully reaching its goals, is referred to as AI research.

AI tools have undergone extensive testing as clinical trial tools, specifically to aid in decision-making for prognosis and projection, as well as each stage of diagnosis and subsequent therapeutic maneuvers, because of their excellent abilities and capacities in recognizing significant data patterns.

AI technology has been widely applied in endodontics. When utilizing periapical radiographs to determine the working length and minor anatomic constriction, the Artificial Neural Network (ANN) (96%) outperformed an endodontist (76%) by a wide margin. As a result, an ANN may be thought of as an accurate approach for determining Working length.

AI is also utilized to identify pathological lesions such periodontitis, periapical disease, and tooth caries. In panoramic radiographs, a deep learning algorithm model has an accuracy rate of 92.8% for detecting periapical radiolucencies. Moreover, ANN has been used to analyse CBCT pictures to detect cystic lesions. Also, an approach that has significant usefulness in clinical practice was developed to distinguish granuloma from periapical cyst.

Oral and maxillofacial surgeries have undergone a revolution thanks to AI, and there are now several robotic surgeons who, with growing efficiency, carry out semi-automated surgical procedures under the supervision of a skilled surgeon.

With advancements in ANN, laboratories are utilizing AI to autonomously create innovative dental restorations that meet the highest standards for fit, function, and aesthetics.

In orthodontics, Orthodontic diagnosis, planning, and treatment monitoring are now all possible using AI.

AI has shown to be quite effective in forensic odontology by determining the biological age and gender of the healthy and ill. Additionally, it is employed for analyzing bite marks and predicting mandibular morphology.

Furthermore, one of the most creative uses of AI is in the field of "bio printing," which allows living tissue and even organs to be created in successive thin layers of cells and may one day be used to reconstruct oral hard and soft tissues that have been lost due to pathological or unintentional causes.

In Dental education, by allowing students to assess their work and compare it to the ideal, the interactive interphase creates high-quality learning settings. Numerous studies on the effectiveness of these systems have shown that students develop a competency-based skill level more quickly with these systems than with conventional simulator units.

**Audience Take Away Notes**

- The presentation will expand the knowledge about AI and its benefit in medical field
- The presentation will assist in decision-making for prognosis as well as each phase of diagnosis and subsequent therapeutic maneuvers
- This review will provide clues for educational improvement seekers

**Biography**

Dr. Samah Mehanny studied dentistry at Cairo University, Egypt. Then she received her Ph.D. degree in 2003 at the same institution. She worked as the head of the oral biology department at Future University, Egypt for eight years. She worked for five years as a course coordinator at Cairo University. She is working now as a course director at Galala University. She has published 23 researches and one is in progress. She is sharing in a graduation project for computer science students, at Ain Shams University, Egypt. She supervised multiple masters and Ph.D. theses.



**Mehdi Khemiss\*, Dorra Chaabouni, Rim Ben Khaled, Mohamed Ben Khelifa**

University of Monastir, Tunisia

## Placebo effect in burning mouth syndrome

**Introduction:** Burning Mouth Syndrome (BMS) is defined as an idiopathic orofacial pain with intraoral burning or dysaesthesia. The aim of this systematic review was to analyze scientific literature with regard to the placebo effect in patients with BMS.

**Methods:** A literature search was conducted through the Pubmed indexed for Medline, Scopus, Cochrane Central Register of Controlled Trials, and Trip databases from their inception to May 31st, 2021. The search terms were defined by combining (Mesh Terms OR Key Words) from “Burning mouth syndrome” AND (Mesh Terms OR Key Words) from “Placebo”. Methodological quality assessment was performed utilizing the Joanna Briggs Institute Critical appraisal tool, attributing scores from 1 to 11 to the selected studies. Literature search, study selection, and data extraction were carried out by two authors. Differences on issues were resolved by a third author, if necessary.

**Results:** A total of 44 articles met the inclusion criteria. After assessing full-text articles for eligibility, 20 articles were excluded. Consequently, 24 articles were retained. A total of twenty-one studies included in this systematic review have a low score of bias. In 13 studies, positive response to the placebo was noted. Among them, seven showed a placebo response indistinguishable from active treatment. These changes are more pronounced in patients receiving placebo compared to active treatment in one study.

**Conclusion:** Placebo therapy may occasionally be both beneficial and ethically acceptable for patients with BMS. In order to get strong evidence for placebo use, future studies with standardized methodology and outcomes are required.

### Biography

Mehdi Khemiss, a 38 years old doctor of Dental Medicine since 2010, graduated from the only faculty of dental in Tunisia. He obtained a master's degree in 2012 (University of Sfax) and a Ph.D. in 2018 (University of Tunis El Manar). He is an associate professor at the University of Monastir teaching Oral physiology, General physiology, Epidemiology, and Biostatistics. He is also an oral facial pain and TMD consultant since 2015 at the department of Dental Medicine at Fattouma Bourguiba University Hospital.



**Abderrahmen Merghni**

Laboratory of Antimicrobial Resistance LR99ES09, Faculty of Medicine of Tunis, University of Tunis El Manar, Tunis, Tunisia

**Staphylococcus aureus a redoubtable pathogen associated with orthodontic treatment**

The use of orthodontic appliances leads to an alteration of the oral microbiota balance. One of the direct side effects of this practice on the oral cavity is the colonization with opportunistic pathogenic bacteria such as *Staphylococcus aureus*. The oral cavity of orthodontic patients may act as a major, yet poorly known, reservoir of *S. aureus* that can induce clinically important infections. The most commonly used materials in orthodontic appliance therapy are brackets, tubes, band material, ligating materials and arch wires. These materials facilitate the microbial adhesion, inhibit oral hygiene and provide new retentive areas for dental plaque, which in turn predisposes the wearer to increased microbial burden and possibility of subsequent infection. Adhesion ability and resistance of *S. aureus* to antimicrobial therapy, disinfecting agents and host defenses allow this bacterium to become potentially life threatening. Therefore, orthodontists should balance the need to provide necessary services while minimizing risk especially for population with high risk for severe illness. Evidence based on the currently available studies, showed that *S. aureus* increased progressively during the treatment and was more in lingual orthodontic appliance than labial orthodontic appliance. However, opposite conclusions were found in the literature about the prevalence of *Staphylococcus aureus* in patients treated with removable appliances compared to those treated with fixed ones. To determine how long *S. aureus* persist in the oral cavity after dental debanding, can make easier to predict the time limit to place implants without risk of failure. More attentions are needed regarding the prevalence of opportunistic bacteria in the oral cavity of orthodontic patient's especially compromised immune system.

**Biography**

Dr. Abderrahmen studied Biotechnology at the Monastir University, Tunisia and graduated as MS in 2009. He then joined the research group of Prof. Mastouri at the Faculty of Pharmacy of Monastir, at the Monastir University. He received his Ph. D degree in 2016 at the same institution. After one year, he obtained the position of an Associate Professor of Microbiology at the Faculty of Medicine of Tunis, Tunisia. He has published more than 25 research articles in SCI (E) journals.



**Mouna Ben Salem\*, Selsebil laajimi, Marwa Chatti, Farah Chouchene, Yamina Elelmi, Fatma Masmoudi, Ahlem Baaziz, Fethi Maatouk, Hichem Ghedira**

Pediatric and Preventive Dentistry Department, Faculty of Dental Medicine of Monastir, Monastir, Tunisia

Laboratory of Biological, Clinical and Dento-Facial Approach, University of Monastir, Monastir, Tunisia

## **An update on functional and esthetic rehabilitation in pediatric dentistry**

Children are frequently exposed to dental caries and various dental anomalies that cause primary or/and permanent teeth decay. This results in several problems like tooth sensitivity, chewing deficiency, psychological complications, esthetic problems, development of parafunctional habits, and even tooth loss. Treatment outcomes are not only to restore masticatory and phonatory functions but also to restore the esthetic aspect of teeth. Treatment of these decayed teeth remains a challenge for the dentist. Especially, young preschool patients who present commonly lack of cognitive abilities and show uncooperative behaviour during treatment. Generally, patient behavior, age, and the extent of restorative treatment required are major determinants in selecting the mode of management. For decayed anterior primary teeth, the treatment includes the following: restorations, bonded resin composite strip crown, full coverage prefabricated crowns as zirconia crowns, or extractions followed by partial dentures. For primary molars, the treatment includes restorations, stainless steel crowns, preveneered stainless steel crowns, zirconia crowns, or extractions followed by partial dentures. Our aim is to present those different procedures using clinical illustrations. The first case concerns a 4 year-old-girl with amelogenesis imperfecta. The treatment plan included stainless steel crowns on the primary molars and rehabilitation with resin-filled strip crowns for upper and lower primary incisors and canines. The second case is about the management of Enamel renal syndrome. The treatment plan includes gingivectomy, stainless steel crowns on permanent molars, and polycarbonate crowns on permanent incisors, canines, and premolars. The third patient presented Molar-incisor hypo mineralization. The treatment plan includes restorations of decayed teeth, stainless steel crowns on permanent molars, and the use of air abrasion for anterior discolored teeth.

### **Audience takes away Notes**

- This presentation will give dentists in general and especially Pedodontics a detailed lecture on the different procedures used to treat the most frequent dental problems that affected children
- Also, it's an update on the recent procedures used to restore the functions and the esthetic of decayed primary and permanent teeth
- Many dentists reported that they have difficulties in dealing with children's dental issues. For this reason, this presentation includes clinical cases to explain how to give children a complete restoration of decayed teeth in the practical side with various diagnosis and different treatment options depending on the clinical situation

### **Biography**

Dr. Mouna Ben Salem, post-graduate dental student at the University of Monastir, Tunisia in 2022. She has occupied the post of resident in pediatric dentistry since 2020. Also, she did a research internship at the Hotel Dieu Hospital in Nantes, France, in 2022. Also, she had an internship at the hospital of 'Necker enfants malades' Paris, France, 2022. She wrote an article about two case reports, published in 2021. The second article is about a systematic review, it will be published soon in the 'European Journal of Dentistry'.



**Maria Fernanda Borro Bijella**

UNIRON – Faculty of Education of Porto Velho, Porto Velho, Rondonia, Brazil

## Oral health in the western amazon: Challenges and advances with planificaSUS

In 2019, the Health Care Plan (PAS) was agreed upon in the State of Rondonia as a proposed methodology to overcome the fragmentation of the current care model in the SUS. This PlanificaSUS methodology was proposed by the National Council of Health Secretaries (CONASS) to overcome the fragmentation and low resolution of the current health care model in the Brazilian public health system. Based on clinical guidelines of the Care Model for Chronic Conditions and theoretical framework of the social construction of Primary Health Care (PHC). PlanificaSUS aims to promote the development of skills, abilities and attitudes necessary for technical and managerial teams to organize, qualify and integrate the work processes of Primary Health Care (PHC), Specialized Ambulatory Care (AAE), triggering changes in the modus operandi of the processes, in order to improve health services to advance assistance to SUS users in an integrated and integrated way between Primary Care and Specialized Outpatient Care. To this end, the strengthening of PHC is chosen as a priority, understanding it, as the gateway/access of users to the Unified Health System (SUS), to be the fundamental axis for this change. In the first 2 years of planning, 4 stages of the methodology proposed by Hospital Albert Einstein were developed, involving PHC and AAE: The integration of PHC and AAE into a Network; Territory and Population Base Management; Access to RAS; and Care Management. For that, in addition to a lot of training for the multidisciplinary teams working in both spheres, a lot of articulation, negotiation, monitoring of managers and staff was necessary in order to make the necessary adjustments possible, both technological and operational. During all stages of implementation in the Madeira Mamore Health Region (region that surrounds the state capital), approximately 2,300 health professionals participated in the Workshops and 300 in the Tutorial Workshops (held in 08 units of the PHC and 01 of the AA). During these events, the change of paradigms was notorious, the breaking of inertia to face the problems, both of the population assisted and also of the teams themselves. This confrontation gained strength during the pandemic, where the population of the areas covered by the laboratory units were able to verify, despite the impacts on the flow of the units due to isolation, a more calm, safe, planned and effective maintenance of the service processes. This new model of “doing” has provided a great advance in the work process and in the organization of Primary Health Care, increasing population coverage, the number of consultations and procedures carried out, tightening the interactions between basic and specialized care and providing greater resolution to the demands of the population. Thus, this lecture aims to report the contributions of the PlanificaSUS project in the scope of primary care in Porto Velho/RO. This is an experience report type study, carried out throughout the development of the project stages within the Laboratory Units of the capital of Rondonia.

### Audience Take Away Notes

- PlanificaSUS is a methodology aimed at developing skills, abilities and attitudes necessary for technical and managerial teams to organize qualify and integrate work processes. This methodology proved to be effective in expanding coverage, promoting quality and safety in health care. Its disclosure can bring to light discussions about improvements in state and municipal services
- PlanificaSUS is a strategy that demonstrates high potential for the qualification of health services and

their organization. During its implementation, it brings to light debates about the organization of PHC in a network with the SEA and, consequently, benefits thousands of users of these services. The joint action of APS and AAE managers and professionals has contributed to the organization of this network in order to make it more effective and with higher quality

- Undoubtedly, this work can and should be tested and implemented in different Brazilian municipalities, as well as in other cities around the world.
- Undoubtedly, it brings information and reports of successful experiences that can simplify the organization of flows to obtain safe and quality assistance
- Yes, with the dissemination of the results obtained in this project, it will facilitate the implementation in other cities and service networks

### **Biography**

Dr Fernanda Bijella graduated in Dentistry from the University of Sacred Heart, is a specialist in Public Health from the University of Brasilia and completed her Master's and Doctorate in Pediatric Dentistry at FOB-USP. She was a professor from 2005 and in 2018 took over the coordination of the Dentistry course at UNIRON. From 2011 to 2018, she worked as a Pediatric Dentist in the Brazilian Army (HGU-PV) and is currently an employee of the Municipal Health Department of Porto Velho (SEMUSA-DSB) and Tutor of the PlanificaSUS Project.



27-29 APRIL

DAY 03

KEYNOTE FORUM

7<sup>TH</sup> EDITION OF  
INTERNATIONAL CONFERENCE ON

# DENTISTRY AND ORAL HEALTH



## Rethinking conversational hypnosis: A great tool in pediatric dentistry

Language and behaviour is interwoven. Effective verbal communication is essential in the dental office because all behaviour is modified by communication. The art of influencing the Child's mind in a normal conversation by selecting the use of correct words and language patterns is considered as conversational hypnosis. It's a scientific and systematic method to change thoughts, emotions, decisions and behaviour in a completely unconscious way.

Treating the challenging child today requires a different approach for behavioural guidance. The ultimate thing of behaviour guidance could be preventing the misbehaviour before it happens and hypnosis can be an extremely valuable aid with children. Hypnosis is an altered state of consciousness in which the ability to accept suggestions for psychological, physical and spiritual change is heightened. Children over 4 years have the necessary verbal understanding and their blind trust and vivid imaginations makes them susceptible to suggestion. This particular trait makes children as desirable hypnotic subjects.

The most challenging aspect of paediatric dentistry is persuading a child to readily accept treatment. It is no longer surprising that hypnosis is used for persuasion or convincing. Persuasion gets so much easier when the subjects have no idea that you are doing. Conversational hypnosis, also commonly known as Covert Hypnosis (CH) it is the art of influencing by giving direct subconscious commands to follow that seem like normal conversation. It is a style of communication that one uses to subtly direct anyone's subconscious mind to take action.



### Anup Kumar Panda

College of Dental Science & Research Centre, India

#### Biography

Dr. Anup Kumar Panda graduated from Pune University and completed postgraduation in pediatric & preventive dentistry from Bapuji Dental College & Hospital, Rajiv Gandhi University of Health Sciences and Karnataka. He is working as a professor, department of pediatric & preventive dentistry Padmashree Dr. D. Y. Patil Dental College & Hospital, a serious attempt to spread his experience & educating the new pediatric dentist. His interest and love for understanding and working with. Dr. Anup has the privilege of being the first Pediatric dentist in Navi Mumbai to have practiced exclusive Pediatric Dentistry. Having done various courses in the field of Pediatric Dentistry, conscious sedation, and hypnosis from India and abroad, he has over 10 years of exclusivity practice experience. His special interest is in child management, treating the Oral conditions of children below 5 years and children with special needs. Lovingly known as "the dentist uncle" by the kids, he also runs a specialized Pediatric Dental Practice in Mumbai apart from being a Consultant Pedodontist in various hospitals and clinics.

## Blood & its products as regenerative agents in dentistry

**B**one regeneration in dentistry involves the use of cells, biological or artificial biometric scaffolds, and bio factors that promote cell growth and differentiation along complex pathways to repair the tissue. Growth factors have a crucial role in this process since they influence chemotaxis, differentiation, proliferation and synthetic activity of bone cells, thereby regulating physiological remodeling and bone healing. That makes the use of the autologous and recombinant Growth Factors (GF) a rapidly growing field of regenerative dentistry focusing on manipulating GF and secretory proteins to maximize the healing of bone and soft tissues. Most of the growth factors derived from autologous blood is released upon platelet activation, and their clinical use has been popularized with Platelet-Rich Plasma (PRP), Platelet Rich Fibrin (PRF) & its advancements namely A-PRF& i-PRF, Concentrated Growth Factors (CGF), Sticky Bone Concept etc. It is time to use this 'BLOOD' in different ways to achieve regenerative potentials in the field of dentistry.



**Preetinder Singh**

Academy of Oral Surgery, USA

### Biography

Dr. 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 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, and LANAP etc. Under his guidance and work, his department was awarded as the centre of excellence in dental implants in his state.

## Essentials of professionalism for dentists

This presentation aims to share our experience with introducing the essentials of professionalism into the undergraduate dental curriculum to answer the evolving identity, integrity, and inter-professional challenges the dental profession faces now. The major educational objective of the “Essentials” was to provide the graduating doctors of dental medicine with appropriate knowledge, skills, and attitude relevant to their socio-professional role as liberal practitioners, while partnering with the public healthcare system, especially: Understanding of social and public health phenomena and processes, which take place at the individual, group and community level; analyzing health status determinants and health indicators; making decisions based on critical evaluation of evidence; solving technological, medical, legal and ethical problems. Implementing a set of relevant topics under the label “Essentials of professionalism in dentistry” we tried to assist our students and graduate dentists to recognize, assess and solve problems through better communication and organization of work. In this relation, we produced a series, of three textbooks to refer to core facts and the newest findings relevant to the dental profession and the practice of dentistry. The text aimed to stay focused, balanced and concise, giving opportunity for upgrade and adoption, according to national particularities while keeping in view the adequate global and longstanding professional performance worldwide. The content and sequence of the chapters are primarily meant to keep and develop professional autonomy, encourage the development of professional knowledge and science, ensure a decent professional realization, inspire humanity and responsibility, and lifelong interest in perfection and safety at the working place.



**Lydia Katrova**

Medical University of Sofia,  
Bulgaria

### Biography

Lydia Katrova studied dentistry at the Medical University and received her Ph.D. degree at Sofia University “St Kliment Ohridski”. She obtained the position of an Associate Professor in 2008 and a Full professor in 2013 at the FDM-Sofia. She is a dentist, a specialist in public health, a doctor in sociology, and an experienced teacher, skilled in curricula design, lecturing, international relations, healthcare research, Ph.D. theses mentor at home and abroad, and institutional assessment, contributing to the elaboration of legal regulations relevant to healthcare and education reforms and harmonization of

dental education.; visited 40 universities and dental schools. Her production consists of more than 300 works, including 116 publications (3 monographs, 13 textbooks, and 90 papers in Bulgarian, English, and French), 109 conference contributions (47 international and 62 national), and reviews of graduating student theses, academic grade awarding, scientific projects, and international institutional and program accreditation. She lectured courses to undergraduate and graduate students, dental practitioners in Social Medicine, Medical Ethics, Public Health; Community Dentistry and Dental Practice Management; Ethics and Deontology; Dental ergonomics, Research methods, and Burnout prevention. Her merits are recognized with the GSK SCHOLARSHIP “Sociology in dentistry” for 2020, the Sign of merit “SIGNUM LAUDIS” for contributing to the implementation of advanced education and research activities at the MU of Sofia for 2012, and the Award for mature educators “Excellence in Dental Education” of the ADEE for 2011. Her biography is included in the “Great Bulgarian Doctors” Book for 2010.

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**SPEAKERS**

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**Lujain Al Sahman**

Oral medicine & diagnostic science, KSU/BDS, PhD candidate, Riyadh, State, Saudi Arabia

## Awareness among dental practitioners towards radiation hazards and protection in Saudi Arabia

**Background:** Dental X-ray is a fundamental part of dentistry. It contributes to the establishment of a definitive diagnosis and the proposed treatment plan. Several modalities are used, ranging from conventional to cone-beam computed tomography with varieties of doses absorbed by the living tissue.

**Methods:** Self-structured questionnaire was established and distributed among 119 dental practitioners working in private and government hospitals through Google® forms. Final-year graduate students of King Khalid University in Abha, Aseer region, Saudi Arabia, were involved as well.

**Results:** A total of 119 participants were included in this prospective survey with a mean  $\pm$  S.D. age of  $33.30 \pm 3.6$ . There is a significant difference ( $P < 0.05$ ) among the participants in their responses to the most sensitive organ to X-ray, whether the handheld portable X-ray unit was safer than the traditional one, and their knowledge about handheld portable X-ray units. Additionally, there is a significant difference in the responses to whether they used a monitoring device, the distance kept while taking X-rays and whether they have the patients wear a thyroid collar.

**Conclusions:** The overall extent of awareness of the participants of the dental X-ray hazards, protection measures being followed, and the modes of updating knowledge were found to be satisfactory. The study results will help practitioners to improve their knowledge and to consider protective measures strictly.

### Audience Take Away Notes

- This presentation will fulfill dentist understanding toward dental x-ray hazards, improve their knowledge toward use in more careful way of radiograph, moreover allow their research mind to open toward such papers
- This presentation will allow audience to expand their opportunity in learning about public awareness in practical prospective, this research allow other faculty to use to expand their research and teaching it is provide a practical solution to a problem that could simplify or make a designer's job more efficient
- The awareness of the participants included in the survey study was satisfactory to some extent. Postgraduate students and staff reported better awareness about radiation hazards and protective measures than the other participants. Continuous education in terms of knowledge improvement and protection implications can increase the level of awareness in the future

### Biography

Lujain studied Dentistry at the King Khalid University, Saudi Arabia, and graduated a bachelor's degree with excellence in 2019. Qualified as an employee in the ministry of health. She then joined the Doctor of Science in Dentistry (DScD) in Oral medicine & diagnostic science at King Saud University, Riyadh. She received her The Diploma of Primary Care Dentistry (Dip PCD RCSI) degree in 2021 at Royal College of Surgeons in Ireland. She has published more than 7 research articles in (E) journals.





### **Victor Fabrizio Cabrera Pazmino**

Hospital for Rehabilitation of Craniofacial Anomalies – HRAC/University of São Paulo – USP, Bauru, Sao Paulo, Brazil

## **Clinical aspects of cleft lip and palate from a periodontal and peri-implant point of view**

The interdisciplinary treatment of patients with cleft lip and palate has always been a challenge for professionals, especially when the aim is to restore proper aesthetics and function in areas affected by cleft palate, which frequently cause dental, bone and gingival loss. It is important to know the periodontal and peri-implant clinical characteristics, corrective and regenerative procedures, difficulties and sequelae that cleft palate entails, for the correct planning of rehabilitative and esthetic treatments in this type of patients.

### **Audience takes away Notes**

- What are “cleft lip and palate”?
- Periodontal treatment in patients with cleft lip and palate
- Rehabilitation with dental implants in patients with cleft lip and palate

### **Biography**

Cabrera studied Dentistry at the University of Cuenca, Ecuador (2007). He graduated as a Specialist in Implantodontics and Dental Prosthetics at the CPO UNINGÁ/Bauru-Brazil; Master in Dentistry – Periodontics Concentration Area at the School of Dentistry of Araçatuba of the Universidade Estadual Paulista “Júlio de Mesquita Filho”, FOA-UNESP/Araçatuba-Brazil; Doctorate and Post-Doctorate in Sciences at the Hospital for Rehabilitation of Craniofacial Anomalies – HRAC of the University of Sao Paulo – USP/Bauru-Brazil. He is a member of the editorial staff of Revista Nacional de Odontologia (Colombia), Revista Odontologia Sanmarquina (Peru) and Revista ReportaEndo (Ecuador). He has clinical experience in Plastic Periodontal Surgery, Guided Bone Regeneration, and Periodontics in patients with cleft lip and palate, and Periodontitis in alcoholic animals. He has research experience with Histological Analysis Techniques, Histometrics, Immunohistochemistry, and Three-dimensional Analysis Methods in digital models (3D) and Systematic Reviews.



**Sundaram Rajasekar**

Department Of Periodontology, Government Dental College & Hospital, India

## **Lasers in periodontal therapy - A critical review**

**P**eriodontal disease, an inflammatory disease caused by periodontal pathogens leads to destruction of the supporting structures of the teeth due to Host bacterial immune inflammatory reaction. Conventional non-surgical and surgical periodontal treatment has been performed for many years to treat periodontal disease. Though successful, these procedures have certain limitations. In the last few decades lasers have emerged as promising tool in the Dental and Periodontal treatment. Lasers have several proposed advantages such as ablation, vaporization, pocket sterilization and haemostasis. There are different lasers available for periodontal procedures. Though many studies have shown promising results of lasers in non-surgical periodontal therapy its effectiveness in surgical periodontal therapy is yet to be fully established. The aim of this presentation is to critically evaluate the effectiveness of various lasers in non-surgical and surgical periodontal therapy and discuss the merits and de merits of using lasers.

### **Audience Take Away Notes**

- The audience will learn to know the types of lasers and their applications for Various Periodontal procedures and also helps them to update on the advantages and merits of using lasers
- Also, they will be able to critically analyse the evidence on benefits and drawbacks of using lasers for treating periodontal diseases

### **Biography**

Dr. S Rajasekar who is presently working as a Professor of Periodontology at Government Dental College & Hospital, Cuddalore district, Chidambaram, Tamil Nadu India passed out his B.D.S in 1991 and M.D.S (Periodontology) in 1997 both from Rajah Muthiah Dental College and Hospital, Annamalai University and has a teaching experience of more than 25 years. Has more than 65 papers published in various National and International journals and delivered more than 35 guest lectures in various conferences. Has guided more than 10 MDS dissertations and 02 Ph.D. theses. He is also a Reviewer for an Indexed Journal-Journal of Indian society of Periodontology.



**Krishna Subedi<sup>1\*</sup>, Kamlesh Prasad Yadav<sup>2</sup>, Rajan Sharma<sup>3</sup>, Bishal Poudel<sup>3</sup>, Aashma Sapkota<sup>4</sup>, Shristi Chapagain<sup>5</sup>**

<sup>1</sup>Lecturer, Community Dentistry, Gandaki Medical College Teaching Hospital & Research Centre (P) Ltd., Pokhara, Gandaki, Nepal

<sup>2</sup>Provincial health directorate province-2, Nepal

<sup>3</sup>Department of Psychiatry, Pokhara Academy of Health Sciences, Pokhara, Gandaki, Nepal

<sup>4</sup>Private dental practitioner, Pokhara, Gandaki, Nepal

<sup>5</sup>Bachelor of Science in Nursing, TU Teaching Hospital, Maharajgunj, Kathmandu, Bagmati

## Psychological impact of COVID-19 among healthcare workers in Nepal: An analytical cross-sectional study

**Introduction and Objectives:** Many psychological problems including stress, anxiety, insomnia, depression, frustration, denial, anger, and fear emerged during the COVID-19 outbreak. This study was done to assess the prevalence and associated factors of depression, anxiety, stress, insomnia, and fear experienced by healthcare workers during COVID-19 in Nepal.

**Materials and Methods:** This was a web-based analytical cross-sectional study conducted among healthcare workers from 27th December 2020 to 28th February 2021 all over Nepal. All the healthcare workers including doctors, nurses, and allied healthcare professionals from seven provinces were selected using the convenience sampling technique. Data collection was done using validated questionnaires. Univariate and binary logistic regression analyses were performed to find the association between the different variables. Statistical significance was set at  $p < 0.05$ .

**Results:** A total of 608 healthcare workers completed the survey with a mean age of  $30.82 \pm 6.68$ . The majority were dentists (41.28%) followed by medical doctors (25%). About 18% were infected by COVID-19, 49% were working in lockdown as usual and 44% were working in government hospitals. About 27% had symptoms of depression, 28% anxiety, 10% stress, 18% insomnia, and 49.8% had fear of COVID-19. Resident doctors and health workers who had a bachelor's level of education and working experience of fewer than two years were significantly associated with higher odds of experiencing depression and anxiety. Health workers working 2-5 years and more than five years' experience had significantly lower odds of experiencing fear. History of tobacco use or medical condition had significantly higher odds of experiencing depression, anxiety, stress, insomnia, and fear.

**Conclusion:** This study concluded that the prevalence of depression, anxiety, insomnia, and fear was found to be high. Resident doctors, health workers with a bachelor's level of education, working experience of fewer than two years, and a history of medical conditions were significantly associated with experiencing adverse mental health outcomes.

**Keywords:** Anxiety and depression, COVID-19, Insomnia and fear, Health care workers, Stress.

### Audience Take Away Notes

- During pandemics like COVID-19, Health care workers have to suffer a lot to their mental health
- Health care workers themselves and the government and stakeholders of the hospital should be prepared to tackle mental health during the pandemic
- Junior doctors/health care workers should be properly trained and supported during the pandemic
- Stress-reducing programs should be conducted for the upliftment of mental health during the job

**Biography**

Dr. Krishna Subedi completed BDS and MDS in Public Health Dentistry in 2019 from the B. P. Koirala Institute of Health Sciences (BPKIHS), Nepal. He then joined in Pokhara Academy of Health Sciences (PAHS) as a lecturer for two years. Currently, he works as a lecturer and HoD of Community Dentistry at Gandaki Medical College Teaching Hospital & Research Centre, Nepal. He is a managing editor of the JGMC-Nepal and a member of the Institutional review committee at PAHS. He also worked as an editorial member in the Medical Journal of PAHS for two years and published 8 original research articles.



**Kanika Gupta Verma**

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

## Ergonomics - The Human Engineering

Ergonomics is broadly defined as the study of individuals in their working field. It is explained as the process of arranging and designing the place of work, equipments and systems being used, so as to make them fit for people to use them. The ergonomics aimed to prevent the Musculoskeletal Disorders (MSDs) and associated injuries being caused by sustained or sudden experience of force, jerks, repetitive movements, and uncomfortable posture. Dental set up can also cause various health issues among the dental health professionals. Various Musculoskeletal Disorders (MSDs) are encountered in our field related to wrong posture, prolonged work duration and incorrect instrument handling. This can cause harmful impact on the occupational health, productivity, and careers of the dentists. Ergonomics evaluate the work being done, how it is done, what kind of instruments are being used and what is the overall assessment of the working environment. The healthy ergonomic conditions are safest, easiest, safest, and most well-organized methods to work. An improved ergonomic dental working set-up created by assessing the dental set-ups helps in increasing the safety and overall well-being of dental health professionals, their assistants, as well as patients. The application of ergonomics in pediatric dental set up not only provides us with safety benefits but also enhance our working capability and productivity. This also helps in reducing mental as well as physical stress that happens in day to day dental practice.

### Audience Take Away Notes

- The concept of ergonomics in dentistry helps in increasing the awareness among dental professionals in relation to their health and wellbeing
- The use of this concept in practice, not only benefit the dental professionals but can also provide maximum benefit to pediatric population

### 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, and Punjab in 2009. She is fellow in scientific writing and Clinical trials. She has been working as an active academician since 13 years, with a keen interest in aesthetic and surgical management of children and adolescents. She is teaching both graduates and post graduates in the field of child oral health care. She is presently working as Professor in Deptt of Paediatric & Preventive Dentistry, Teerthankar Mahaveer Dental College and Research Centre, Moradabad. She is also a life member of Indian Society of Paediatric & Preventive Dentistry; and Indian Dental Association. She has around 65 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.



### **A. Siddhartha Varma<sup>1\*</sup>, Rashmi Gangavati<sup>2</sup>**

<sup>1</sup>Department of Periodontology, School of Dental Sciences, KIMS Deemed To Be University, Karad, Maharashtra, India

<sup>2</sup>Department of Oral Pathology, School of Dental Sciences, KIMS Deemed To Be University, Karad, Maharashtra, India

## **Photobiomodulation in dentistry – A light that heals**

**A**s a Practitioner, standing out from the competitive world requires a value addition to your treatment options not found in every office which separates you from the pack. When most dentists hear the word laser, they often think of a hard or soft tissue lasers that are meant for cutting. Low Level Lasers are another subset of lasers that are relatively unknown to many dental practitioners, with a potential to be an invaluable tool to your dental practice. Photobiomodulation (PBM) is a fairly recent trend in the dental industry despite being developed more than half a century ago. Utilizing technology like dental lasers for PBM treatments does more than amplify efficiency, care, and productivity in a dental office and it also boosts the perception of the dentist as a progressive, dynamic, modern clinician. Applications of PBM in dentistry have been of great interest in the recent times. It can both stimulate and suppress biological effects. The property of PBM contributes to the analgesic, anti-inflammatory, and wound healing effects. Photobiomodulation Therapy (PBMT) has a wide variety of clinical applications that include wound healing, prevention of cellular death, promotion of repair mechanisms, reduction of inflammation, pain relief, etc. Hence, it is being used effectively in the field of oral medicine and has shown promising results in the management of oral mucosal lesions, orofacial pain, and other orofacial ailments without much significant adverse effects.

This presentation highlights the relatively unseen side of dental laser applications with a healing touch in dentistry.

### **Audience Take Away Notes**

- Basics of PBM
- Applications of PBM in dentistry
- How to choose a laser for dental practice

### **Biography**

Dr. A. Siddhartha Varma completed his BDS in 2005 and Masters in Periodontology and Oral Implantology in the year 2010 from Rajiv Gandhi University of Health Sciences, India. He is currently working as Associate Professor in School Of Dental Sciences, Maharashtra, India. He completed a Diploma Course in Medico legal laws and ethics and cleared with distinction securing 2nd Rank in the University. He has more than 70 national and international publications and eight copyrights to his credit. He co-authored a Textbook by name “TOOTH TEACHER” a first of its kind book in Braille script for the visually impaired.



**Salim Musa Mulla**

LRP Ayurveda Medical college, Mulla Ayurvigyan Hospital, Islampur, Sangli, Maharashtra, India

## Dental & oral health – Ayurveda perspective

**S**trong & beautiful teeth are reflections of smartness & indicator of good body health. Our teeth & body are dependent and have effects on each other. Good care of our teeth and gums can really help to live healthy, longer. Mouth is the entry point to digestive and respiratory tracts. Oral bacteria and the associated inflammation might play a role in some diseases. Normally the body's natural defenses and good oral health care, like daily brushing and flossing, keep bacteria under control. Oral health might contribute to various diseases and conditions including endocarditis, cardiovascular diseases, pneumonia, pregnancy & birth complications. Certain conditions might affect the oral health, including diabetes, HIV/AIDS, osteoporosis, Alzheimer's disease. Poor oral health can lower body immunity also. As per Ayurvedic dosha-dhatu (Body basic elements) concept, everything in body is made up from aahara (food) after proper digestion. Teeth are considered as asthidhatu (bone tissue), gums & tongue as raktadhatu (blood) & mansa (muscle tissue) dhatus. During first & second trimester of embryonic life when these tissues are being formed, all essential factors should be normal. Any internal or external factor like drug intake, malnutrition may affect normal tissue formation. Diet at that time should be healthy to bones & mansa (e.g. Milk & milk products). Asthidhatukshaya (osteoporosis) adversely affects teeth health making them to decay. Whereas vidaha or vikruti (inflammation /pathological change) in rakta & mansa adversely affects gum health making them prone to decay & infection. In dincharya (daily regimen) Ayurveda guides for proper oral hygiene with use of simple herbs for teeth cleaning & mouthwash, gargling, miswak etc. Ayurveda guides for proper intake of rasas (tastes) in food. Much use of madhura (sweet), lavana (salty) & amla (sour) is to be avoided. Instead we should consume sufficient tikta (bitter), katu (pungent) & kashaya (astringent) rasas. Herbs taken internally to strengthen asthidhatu are good for long – term health of the teeth. Neem bark & leaf extract is most effectively used in preventing cavities and gum disease. Mouthwash containing neem is a remedy for tooth decay, oral infections, prevents bleeding and sore gums. Twigs of neem tree (*Azadirachta indica*) are used as chewing sticks by people all over India. Oral rinses made from these are used in periodontal therapy. Triphala is one of these with wide spectrum of activity. According to the Sushruta Samhita, triphala can be used as a gargling agent in dental diseases. Body purification processes of Ayurveda panchakarma like vamana (therapeutic emesis), virechana (therapeutic purgation), nasya (nasal route purification) can do a lot for body & oral health. Also supportive purification processes like shirodhara (head oil instillation therapy), Kavala (holding medicines in mouth)/Gandoosh (gargling), tambool (Betel leaf) etc. also contribute a lot for oral health. In today's era when many modern medicines are proving inefficient to fight newly emerged viruses, bacteria & other pathogens, Ayurveda definitely shows hopes to boost the immunity & effectively fight against various health issues.

### Audience Take Away Notes

- Knowledge about basics of Ayurveda regarding dental & oral health
- Information about teeth formation, nutrition, prevention & Ayurveda treatment guidelines of common teeth disorders
- We can prevent many dental & oral health problems with these facts & keep human beings away from many oral & systemic diseases



- Cosmetological effects of these therapies are also useful regarding strong & beautiful teeth as reflections of smartness & indicator of good body health
- Doctors of all disciplines can use this knowledge in day to day practice for prevention & treatment aspect of patients
- Special dental & oral health consultation centers can be run by doctors & experts can get better job opportunities at multispecialty dental health centers
- Ayurveda knowledge can be incorporated in dental course teaching in dental colleges. That will enhance scope of learning
- Further research on Ayurveda aspects of dental & oral health will be helpful for holistic health

**Biography**

Prof. Dr. Salim Mulla is working as a Professor at Maharashtra University of health Sciences Nashik, LRP Ayurveda Medical College, Sangli, Maharashtra, India. He passed out Master of Surgery in Ayurveda in 2004 & pursuing PhD at MUHS Nashik. He has a teaching experience of about 19 years. Has 9 research papers published in various National and International journals and delivered many lectures at various conferences. He is guide for MD/MS Dissertations. Attended more than 100 national & international conferences & seminars. Also involved in clinical practice for about 22 years. His interest fields are Ayurveda, Vitiligo & skin treatment, Infertility, Preventive cardiology.



**Rehana Faryal Mehdi**

Fazaiya Ruth Pfau Medical College, Pakistan

## Survivin promoter polymorphism (-31C/G): A genetic risk factor for oral cancer

The polymorphism of survivin gene at its promoter region is one of the risk factors for OSCC. This polymorphism involves substitution of G for C (9904341), and it is present at the cell cycle dependent elements and cell cycle homology region repressor binding motif of promoter. This study aimed to find the association between survivin-31C/G polymorphism and prevalence of OSCC in a subset of Pakistani population.

**Methodology:** This case-control study was conducted on 47 cases with and 101 healthy individuals with no family history of cancer. We used Polymerase Chain Reaction and Restriction Fragment Length Polymorphism (PCR-RFLP) protocols.

**Results:** The most common site of oral cancer in our research was the buccal mucosa followed by tongue and the least one was the labial mucosa. The histological tumor type of all 47 cases was squamous cell type. In our research, stage II had the highest prevalence, accounting for 34% of patients, while the prevalence of stage I was 31% in the case group. The prevalence of stage III and IV was 25% and 8%, respectively. The numbers of moderately and poorly differentiated tumors were equal. We found a significant association between the CC genotype of survivin and OSCC prevalence (OR was 9.395 at 95% CI: 1.0202-86.5251, p-value=0.04). The GG genotype also showed significant P value (OR: 0.4709 with 95% CI: 0.2323- 0.9546 at a P VALUE of 0.0367). While no significant P value was noted for CG genotype (OR: 1.4317 with 95% CI: 0.7513-2.8658, p-value=0.31).

**Conclusion:** Survivin-31G/C polymorphism was strongly associated with OSCC prevalence. The C allele was more common in case group as compared to healthy individuals living in Pakistan.

### Biography

Dr. Rehana Faryal Mehdi completed her bachelors in dental surgery in 2012. She pursued her career in the pathology of Oral Cancer with a Master's degree in 2019 from Ziauddin University, Karachi. Her passion lies in the genomics of Oral cancer and wishes to start genetic screening for oral cancer in her region in order to reduce the burden of oral cancer which is one of the most prevalent cancers in Pakistan. She has a number of International and national publications. She is currently serving as a faculty member and Journal Club Coordinator in Fazaiya Ruth Pfau Medical College, Pakistan.



**Seham Mohamed**

University of Bahrain, Bahrain

## Are oral health conditions associated with children's school performance and school attendance in the Kingdom of Bahrain? A life course approach

**Background:** The link between Oral Health Conditions (OHCs) and school performance and attendance remain unclear among Middle Eastern children. The association has been studied extensively in the Western region; however, several concerns have been raised regarding the reliability and validity of measures, low quality of studies, inadequate inclusion of potential confounders, and the lack of a conceptual framework. These limitations have meant that, to date, there has been no detailed understanding of the association or of the key social, clinical, behavioural and parental factors which may impact the association.

**Aim:** To examine the association between OHCs and children's school performance and school attendance at Grade 2 in Muharraq city in the Kingdom of Bahrain (KoB) using Heilmann et al.'s (2015) life course framework for oral health (OH).

**Objectives:** To describe the prevalence of OHCs among 7-8 years old schoolchildren of the good, rated schools in the city of Muharraq. Analyze the social, biological, behavioral, and parental pathways that link early and current life exposures with children's current OHCs by testing the critical, and the accumulation life course models with consideration of social determinants of OH. Examine the association between OHCs and school performance and school attendance among schoolchildren including the direct and indirect (mediated) pathways; Explore the early and current life course social, biological, behavioral and parental factors associated with children's school outcomes in addition to OHCs.

**Design:** A time-ordered-cross-sectional study was conducted with 466 schoolchildren aged 7-8 years and their parents from Muharraq city in KoB. Data were collected through parents' self-administered questionnaires, children's face-face interviews, and dental clinical examinations. Outcome variables, including school performance and school attendance data, were obtained from the parents and school records. The data were analysed using confirmatory factor analysis and Structural Equation Modelling (SEM).

**Results:** Dental caries, the consequence of dental caries (PUFA/pufa), and Enamel Developmental Defects (EDD) prevalence were 93.4%, 25.7%, and 17.2%, respectively. The findings from the SEM showed that children born in families with high SES were less likely to suffer from dentine dental caries ( $\beta = -0.248$ ) and more likely to earn high school performance ( $\beta = 0.136$ ) at 7-8 years of age in Muharraq. From the current life course of children, the dental plaque was associated significantly and directly with enamel caries ( $\beta = 0.094$ ), dentine caries ( $\beta = 0.364$ ), treated teeth (filled or extracted because of dental caries) ( $\beta = 0.121$ ), and indirectly associated with dental pain ( $\beta = 0.057$ ). Further, dentine dental caries was associated significantly and directly with low school performance ( $\beta = -0.155$ ). At the same time, the dental plaque was indirectly associated with low school performance via dental caries ( $\beta = -0.044$ ). Conversely, treated teeth were associated directly with high school performance ( $\beta = 0.100$ ). Besides OHCs, parents' early and current SES were significantly and indirectly associated with children's school performance via parental characteristics ( $\beta = 0.457$ ). Notably, none of the OHCs, biological, SES, behavioural, or parental conditions was related to school attendance in children.

**Conclusion:** The life course approach was adequate to examine the role of OHCs on children's school performance and attendance. Birth and current (7-8-year-olds) social factors were significant predictors of poor OH and poor school performance. Dental caries was associated with poor school performance but not with school attendance. Treated dental caries was associated with good school performance.

### **Biography**

Dr. Seham A.S Mohamed (PhD in Dental Public health 2022, University of Sheffield, UK) is the Dental Hygiene program coordinator at the University of Bahrain. She worked as a Dental Hygienist at different government health centres, at a private general dental clinic, with a periodontist, and as a trainee teaching staff at the College of Health Sciences Dental Hygiene Program. She has earned an Associate Diploma in Dental Hygiene from the College of Health Sciences, Bahrain; a B.S. in Allied Dental Sciences at Jordan University of Sciences and Technology; a Master's and PhD in Dental Public from the University of Sheffield, UK. She has approximately 8- years of undergraduate teaching experience. Her area of research expertise focused on preventing and controlling dental diseases and promoting the community's oral health. She published a few original articles in peer-reviewed journals.

**Ahmed Abosabaa**

Prosthodontics, Al Salam University, Tanta, Gharbeya, Egypt

## Dental implant prosthetics in full arch cases

Dental Implant Prosthetics in full arch cases is challenging. Being edentulous is a handicap, and the main objective of implant placement is to provide support of fixed prostheses or to stabilize complete dentures in the edentulous jaw. Implant protocols have been used with the aim of improving the oral and facial characteristics of completely edentulous patients: Overdentures, implant-supported, and full-arch fixed implant supported prostheses. Patient satisfaction is crucial after delivery of this kind of prosthesis especially that patients put high expectations regardless to the type of prosthesis.

### Audience Take Away Notes

- Treatment options in Full arch cases
- Types of Dental Implant Prosthetics
- Case report

### Biography

Dr. Ahmed studied dentistry at Tanta University, Egypt and graduated with general grade Very Good in 2009. He is a member of the Faculty of Dental Surgery since 2012 and now a certified examiner for MFDS exam. He then started his Masters in Prosthodontics in Mansoura University Egypt and got his M. Sc in Prosthodontics in 2018.



**Nehal Fouad Albelasy**

Assistant professor of Orthodontics, Mansoura University, Egypt

## **Simultaneous intrusion and retraction of maxillary incisors using skeletal anchorage**

The increased rate of orthodontic patients complaining of severe crowding has made extraction an inevitable tool for providing spaces for leveling and alignment of the dental arches. Retractions of the anterior teeth have been done using different protocols and mechanics which in turn have their pros and cons. One of the most challenging situations is the retraction of severely proclined maxillary incisors. Many attempts have been made to overcome the side effects of retracting such incisors with conventional mechanics ex; root fenestrations, extrusion, root resorption and anchorage loss. Our research provided a new technique to overcome such side effects and was published in the International Orthodontics 2022 Mar; 20(1). The results showed that the center of resistance (CRe) of the four maxillary incisors was retracted  $2.38 \pm 0.77$  mm and intruded  $2.76 \pm 1.0$  mm with a mean change in axial inclination of  $9.76 \pm 3.45^\circ$ . The mean amount of root resorption of the four incisors was  $1.29 \pm 0.59$  mm over a mean period of 6.2 months. We can conclude that the mini-implant supported 3-piece Burstone base arch had a pronounced effect on SIR of flared maxillary incisors with clinically insignificant amount of root resorption.

**Keywords:** mini-implants, pure intrusion, CBCT, Burstone 3-piece.

### **Biography**

Nehal F. Albelasy is an assistant professor of orthodontics, at the Faculty of Dentistry, Mansoura University, Egypt. She completed her MScs and Ph.D. from the faculty of dentistry, at Mansoura University, Egypt. She is a member of the Egyptian Orthodontic Society. Her last international publication was "Effects on root axes and resorption of simultaneous intrusion and retraction of maxillary central and lateral incisors using mini-implant supported three-piece burstone base arch: A prospective observational study" Int Orthod. 2022 Mar.





**Elaheh Dalir Abdolahinia**

Research Center for Pharmaceutical Nanotechnology, Biomedicine Institute,  
Tabriz University of Medical Sciences, Tabriz, Iran

## **Stem cell homing for regenerative endodontics in nanocomposite hydrogel patterns**

Clinically, functional pulp-like tissue should be capable of producing vascularized and re-innervated tissue that controls the amount of dentin deposition in dental tissue. In this situation, the pulp regenerates close to the healthy pulp. About 50 years ago, Nygaard-Ostby evaluated the hypothesis that blood clots have healing effects in the treatment of damaged tooth pulp. The findings revealed that the blood clot in the pulp tissue of the tooth did not regenerate entirely. Subsequent studies showed that by intentional bleeding into the root canal in immature necrotic teeth, living tissue regenerated, which was associated with neural network sensitivity. Cell homing is an underappreciated approach to tissue regeneration that provides an alternative to cell-delivery-based tooth regeneration and appears to provide a tangible pathway toward clinical translation. Dental stem cells would be a suitable candidate for endogenous stem cells for dental tissue regeneration. Cell-homing approach based on stem cells residing in the oral tissue regenerates new like-pulp with the help of growth factors secreted from the engineered scaffold that can overcome all cell transplantation strategy's challenges. Hydrogel scaffold can be a suitable substrate for dental stem cells to recruit, proliferate, and differentiate. For example, it was proven that a designed peptide-based hydrogel with bFGF for injection into the root canal could serve as carriers of different molecules as well as is a good substrate for the growth of target tissue cells. It may also be used to combine soft and hard tooth tissue to regenerate endodontics. In this speech, I address the importance of cell-homing in endodontics and especially dental nerve regeneration.

### **Audience Take Away Notes**

- Importance of cell-homing in Regenerative endodontics
- Role of endogenous dental stem cells in self-healing tooth by cell-homing approach in Regenerative endodontics
- Role of Growth factors in the recruitment and differentiation of endogenous dental cell homing approach
- Role of Nanocomposite Hydrogel Patterns in Regenerative Endodontics
- Societal effects and impact of Cell-homing strategy in tooth therapy
  - Healthcare and Cell-homing in tooth therapy
  - Economy and Cell-homing in tooth therapy
  - Industry and cell-homing in tooth therapy
  - Scientific impact and cell-homing in tooth therapy

**Biography**

Elaheh Dalir Abdolahinia studied Biotechnology at the Zanjan University, Zanjan, and graduated as MS in 2008. She then joined the research group of Prof. Omid at Research Center for Pharmaceutical Nanotechnology, Biomedicine Institute (RCPN), Tabriz University of Medical Sciences (TUOMS), Iran. She received her Ph.D. degree in 2019 in the Medical biotechnology field at the Zanjan University of Medical Sciences (ZUMS). After two years of postdoctoral fellowship supervised by Prof. Barar at the RCPN, she obtained the position of Research Associate at RCPN, Iran. She has published more than 30 research articles in Scopus journals. Since 2020, she has focused on cell therapy to regenerate damaged tooth tissue.



**Soukaina Rouijel<sup>1\*</sup>, Majid Sakout<sup>2</sup>**

<sup>1</sup>Department of endodontics and conservative dentistry, International University of Rabat, College of Health Sciences, Sala al Jadida, Morocco

<sup>2</sup>Department of endodontics and conservative dentistry, Faculty of dental medicine of Rabat, University Mohamed V, Rabat, Morocco

## **Bioceramic material for root perforation management**

**R**oot perforations have always been a major cause of endodontic failure. It is a communication between the canal system and the external surface of the tooth of pathological or iatrogenic origin. The perforation then becomes an additional passageway between the endodontium and the periodontium. For a long time, the prognosis of root perforations was considered unfavorable and associated with an unacceptable failure rate. In case of perforation, the rate. Success of apical periodontitis which was initially 84% drops to 40%. Even today, root perforation is considered to be synonymous with fatality. Perforation is still today a pathology dedicated to extraction? During the last 30-40 years, the medical industry has experienced a real development of materials that can be used in the field of tissue regeneration and repair. Considerable advances have been made at the technological and scientific level allowing us to introduce into our daily practice a group of materials called “bioceramics”. These bioceramic materials allow by sealing the perforation, to take care of this pathology according to a conservative approach. The purpose of this work is to present through a clinical case the protocol for the management of perforations by these materials.

### **Audience Take Away Notes**

- Explains the risk of root perforation
- Report the interest of bioceramic materials
- Report the indications of bioceramic materials
- Present through a clinical case how to manage a root perforation - Report the limit of use of bioceramic materials

### **Biography**

Dr. Soukaina ROUIJEL studied dental medicine at the faculty of dental medicine of Casablanca, and graduated in 2016. Her thesis has been published in American Journal of educational research. She joined in 2018 the International University of Rabat for the speciality of conservative dentistry and endodontics. She had diploma in biostatistics and methodology of research in 2020.



**Alexander Kharibegashvili**

Faculty of Exact and Natural Sciences, Telavi State University (TESAU), Telavi, Kakheti, Georgia

## The dental forceps for lower wisdom teeth

New dental forceps for the extraction of lower wisdom teeth is discussed. For extraction of lower third molar mandibular third molar forceps are used. This forceps allows us to insert it deeply in the mouth cavity and reach the third molar easily. But the moment of force affixed on the tooth with the help of these forceps is small. Therefore, when the tooth is deeply rooted in the jawbone it is difficult to extract the tooth. In such cases, mandibular molar forceps are used, which are designed for extraction of lower 6th, 7th and 8th teeth. These forceps have a long lever. However, to extract the lower wisdom tooth with these forceps we need to pull the cheek with the same forceps back, far away in the direction of temporomandibular joint which is not always possible due to anatomic features of the patients face. Recently, double curved lower third molar forceps have been in use which has large lever and enables us to easily reach the wisdom tooth. Nevertheless, dentist needs them - two in set - for left and for right third molar. In Telavi University is developed new dental forceps for the extraction of lower wisdom teeth, which is recognized as an invention and for which a patent was obtained. These are conventional dental extraction forceps with a foldable additional lever - handle - on one side of it. In folded condition, these forceps are practically identical to conventional mandibular third molar forceps. When unfolding the additional handle the lever of the forceps enlarges and becomes as big as the one of the lower molar forceps. In folded position dentists use the forceps as ordinary lower third molar forceps. But if the tooth is firmly rooted into the jawbone and the dentist has difficulties in extracting, he/she unfolds the additional lever, holds the forceps in the right hand and the lever in the left hand and with enlarged lever and both hands extracts the tooth effortlessly. As opposed to the double-curved third molar extraction forceps, the proposed forceps along with conventional third molar extraction forceps can be used for extraction of both - left and right mandibular third molars.

### Audience Take Away Notes

- The audience will receive information about a new type of dental forceps for the removal of lower wisdom teeth
- Teachers will receive comprehensive information about the positive and negative aspects of all dental forceps used in dentistry for the removal of lower wisdom teeth, including the newly proposed one. They can share this information with colleagues and teach students
- The audience will receive detailed instructions on how to use the newly proposed dental forceps
- The information obtained will allow dentists to reduce the complexity of the extraction of the lower wisdom teeth

### Biography

Alexander Kharibegashvili was born in 14th May 1959 and lives now in Telavi, Kakheti, 2200, Georgia, Caucasus. He Graduated from Tbilisi State Medical University, the faculty of general medicine with a specialization in neurology, and Telavi Dentistry Institute. He Works in Telavi Dentistry Clinic as a dentist, Telavi Regional Hospital as a neurologist. Also he works as Lecturer in Telavi State University. He has publications and patents for inventions in surgical and prosthetic dentistry, neurology, electromyography, neurosurgery, psychiatry, and also in other fields of sciences.



**Micheline Coelho Ramalho Vasconcelos\*, Dr. Rui Pereira, Dra Edna Maria Costa de Melo, ST Aline Coelho de Araujo**

CADEFI, Institute of Integral Medicine Prof. Fernando Figueira/Recife, Pernambuco, Brazil

## **Speech outcome in patients with unilateral cleft lip and palate submitted to two different palatoplasty protocols**

The main goal of cleft palate repair is to accomplish a good speech with preservation of the maxillary growth. Speech and language disorders are an important issue of the treatment failures. During speech, Velopharyngeal Deficiency (VPD) may occur. Patients with Late Hard Palate Closure(LHPC) showed increased rate of VPD compared to patients with Early Palate Repair(EPR) in some researches Aim Evaluate the speech outcomes in children with unilateral cleft lip and palate (UCLP) who were operated by a single surgeon in a single-center using two different treatment protocols, one a two staged repair with Hard Palate Late Closure(HPLC) and a Control Group with EPR Methods A randomized, controlled, blinded trial was carried out at CADEFI between January 2010 and October 2016 and evaluate speech outcomes in two groups of subjects with UCLP through auditory-perceptual assessment by three experienced speech-language pathologists(SLP) at a different Institution. The intervention group (IG), had two stages repair with LHPC, between 3 and 4 years of age (32 patients) and the control group (CG) with early one stage repair between 9 to 15 months (28 patients). Speech samples were collected and recorded in a standardized manner following Brazilcleft recommendations. For the auditory-perceptual assessment was considered: compensatory articulation disorders (CAD) and hypernasality (present and absent). The unweighted kappa was calculated for the compensatory articulation disorder a hypernasality. Results: Compensatory articulations were absent in 18(56, 25%) patients for the IG and in 19(67, 86%) patients in a CG. Intrarater reliability was calculated for the three SLP raters. Resonance adequated were verified in both groups: GI=32 46,88%(15), mean=1,5(SD± 0,5070), GC=28(60,71%(17),mean=1,6 and SD±0,4973. Conclusion: The findings suggested that the compensatory articulation rate was similar in both groups. The agreement level for the three SLP raters showed better results for the Control Group revealed lower frequency of hypernasality, although without statistical difference.

### **Audience Take Away Notes**

- Randomized controlled trials are important for decision-making by health professionals
- The importance of the influence of primary surgeries in individuals with cleft lip and palate for facial growth and speech results
- The centralization of the treatment of cleft lip and palate in Reference Centers, with a multi and interdisciplinary team are important, offering a complete and humanized service with the objective of promoting better results for this population

### **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.



27-29 **APRIL**

DAY 03

**POSTERS**

7<sup>TH</sup> EDITION OF  
INTERNATIONAL CONFERENCE ON

# DENTISTRY AND ORAL HEALTH



**Claire Dewshi**

DCT2, Morriston Hospital, Restorative Dentistry

## Effects of chlorhexidine cavity disinfection on adhesive restorations

Chlorhexidine (CHX) is a broad spectrum antimicrobial which is used in many aspects of dentistry. The shift towards minimally invasive restorative practice has led to clinicians preserving as much tooth structure as possible and maintaining a layer of caries affected dentine, especially in deep cavities encroaching near the pulp. Remaining bacteria can be responsible for secondary caries, sensitivity, and ultimately failure of the restoration. Furthermore, the increasing popularity of composite resin restorations instead of amalgam means that the science of bonding needs to be considered more carefully as these restorations do not rely primarily on macro-mechanical retention. CHX as a cavity disinfectant has the potential to reduce bacterial load and potentially improve composite bond strength when used correctly, however if it is applied without assessing all the materials and without using the appropriate bonding protocol, it could have a negative impact on the restoration. This poster will highlight the cases where it has shown to improve bond strength and the protocols where it can actually weaken the integrity of the restoration.

Other cavity disinfectants like lasers, sodium hypochlorite and hydrogen peroxide are lesser known alternatives to CHX, however also have their own limitations, and will be discussed in this poster.

### Audience Take Away Notes

- This poster aims to inform practitioners when it is appropriate to use chlorhexidine as a cavity disinfectant
- It will also make practitioners aware of how cavity disinfectants can affect bond strength
- This poster will outline alternative methods for cavity disinfection and their potential side effects

### Biography

Dr Claire Dewshi graduated from King's College London in 2019 and continued to pursue further dental training in secondary care. Having spent time in a Maxillo-facial unit in Sussex and then a Restorative Dental Department in Swansea, she has had the opportunity to see how head and neck cancer patients are treated and then subsequently restored dentally in a multidisciplinary team. She has passion for dental education and mentorship, and has worked with dental charities and widening participation to improve access to the profession.



**Seema Imantabari**

GSTT, United Kingdom

## **An investigation into the impact of changes in dental practices following the COVID-19 outbreak on patients with dental anxiety and their attitudes towards these changes**

**Introduction:** The study aimed to explore the attitudes of adults with dental anxiety towards changes made in dental practices following the onset of COVID-19 and identify any triggers of their anxiety.

**Materials and methods:** A cross-sectional survey study design was employed. An online questionnaire assessed respondents' anxiety levels since the onset of the pandemic compared to before and identified any triggers of their anxiety. Descriptive statistics and thematic analysis were performed.

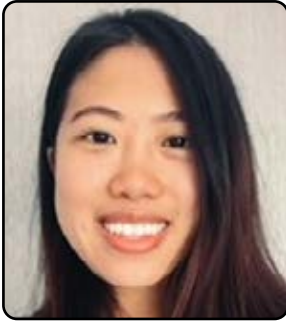
**Results:** The majority of adults with dental anxiety noticed an increase in their dental anxiety levels since the onset of the COVID-19 pandemic. One of the main reasons for the increase has been due to the risk of transmission of COVID-19. Measures which most respondents felt anxious about were the extra PPE, use of teledentistry and having to wait outside the building before an appointment.

**Discussion:** The study provides a novel insight into the impact of COVID-19 on dentally anxious adults, a topic which has not been previously studied in the UK population. The main limitation is the small sample size, therefore to ensure the findings are generalisable to a wider population; a larger-scale study would have to be conducted.

**Conclusion:** The study gives insight into the attitudes of dentally anxious adults during the COVID-19 pandemic and can be used to inform patient care.

### **Biography**

Dr Seema Imantabari obtained an integrated master's degree in Dental Surgery from the University of Leeds, UK. She has previously worked in Buckinghamshire in General Practice and is currently undertaking a post in Restorative, Oral Surgery and Oral Medicine at Guy's and St Thomas NHS Foundation Trust in London.

**Audrey Chew**

Department of Paediatric Dentistry, Sheffield Teaching Hospital NHS Trust,  
Sheffield, South Yorkshire, S10 2SZ, United Kingdom

**An unerupted upper central incisor in an 11-year-old patient**

There are multiple causes for the failure of tooth eruption. This presentation showcases an eleven-year-old patient who presented with an unerupted upper left central incisor which impacted his self-confidence. Clinical examination revealed that the unerupted tooth is palpable in the buccal sulcus but has failed to erupt. His medical history is complicated by the transposition of the great arteries of the heart and asthma. The patient has had three previous cardiac operations and has further surgery planned. This patient is an irregular dental attender and has had previous extractions under general anesthetic. Clinically, the patient has a Class III malocclusion with reverse overjet, and severe crowding and there is a lack of space in the ULI region for the unerupted central incisor. A multi-disciplinary approach involving pediatric cardiology, oral surgery, and the orthodontist is required for assessment and treatment planning. This presentation will explore causes for unerupted teeth, differential diagnoses, medical implications for treatment planning and the treatment challenges involved.

**Audience Take Away Notes**

- Identify causes for failure of tooth eruption
- Identify the different types of odontoma
- Discuss the treatment challenges of working in a multi-disciplinary team
- Appropriate management of cases of this nature

**Biography**

Chew studied Bachelor of Dental Surgery at Queens University, Belfast in Northern Ireland, and graduated in 2017. She then worked as a general dental practitioner in several places including Manchester, Halifax, and Bradford in the United Kingdom. After several years in practice, she started her core training in Oral and Maxillofacial Surgery at Pinderfields Hospital and is currently working within the Paediatric department at Charles Clifford Dental Hospital.

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**Management of horizontal root fracture: A case report**

**T**raumatic dental injuries are the main reasons for an emergency visit to a dental clinic. Root fracture can be defined as a “fracture that involves cementum, dentin and pulp”. Most commonly, horizontal root fractures are seen in the middle third of the root compared to the coronal and apical third.

Root fractures are diagnosed through clinical and radiographic examination. Treatments depend on the position of the fracture, the extent of root involvement, correct diagnosis, clinical management and radiographic follow-up. This presentation presents endodontic management of horizontal root fracture using a fibre post.

**Audience Take Away Notes**

- Explain how to do the diagnosis of root fracture
- Report the management of root fracture using a fibre post

**Biography**

Dr. Soukaina ROUIJEL studied dental medicine at the faculty of dental medicine of Casablanca, and graduated in 2016. Her thesis has been published in American Journal of educational research. She joined in 2018 the International University of Rabat for the speciality of conservative dentistry and endodontics. She had diploma in biostatistics and methodology of research in 2020.



**Maria Fernanda Borro Bijella<sup>1,2</sup>, Raimunda Franklin Lopes<sup>2</sup>, Thalita Fernandes Cardoso<sup>2</sup>**

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## **Impact of the PlanificaSUS project on the quality and patient safety of a UBS in Porto Velho/RO**

Primary health care organizes the health care network (RAS) and is considered the care coordinator as it is the gateway/access for users to the Unified Health System (SUS). At this level of care, medical and dentistry services are offered to the population, in order to have assistance with a multidisciplinary team, normally composed of 1 Doctor, 1 Nurse, 1 Dental Surgeon, 1 Nursing Technician, 1 Oral Hygiene Technician and 4 Health Agents. However, there are gaps in scientific production, especially in the North region, within the states of the Legal Amazon, in relation to the flow of care, control of appointments and patient safety, thus, it is essential to have discussions that have as evidence the exposition on the themes in question. Thus, this study aims to report the contributions of the PlanificaSUS project within primary care in Porto Velho/RO. This is a descriptive study of the experience report type, carried out during the development of the project stages at the Renato Medeiros Family Health Unit, considered one of the four Laboratory Units (UL) in Porto Velho, Rondonia. During the course of 2022, several flows were implemented and internal work processes were organized, especially in phase 1 of the project, in the vaccine room, reception/screening and dental care. Highlighting the SOP for dental care, aiming to guarantee the quality and safety of patients in this sector. In this SOP in question, it was established that all children older than three years of age to be treated in the dentistry room would have their vital signs checked, including blood pressure, as a way of ensuring patient safety in the care offered. Soon after its implementation, such standardization proved to be effective and necessary, as the team was able to identify a child younger than 12 years old with arterial hypertension (SAH) before starting the tooth extraction procedure. This procedure, which requires anesthetic intervention, requires bleeding and the need for suturing, which could bring complications to the patient. After this first warning, the child was referred for follow-up with the team's physician, who requested additional tests and diagnosed the need to start controlling the BP. by medication. In this way, the patient received early treatment for a chronic disease that could greatly harm her adult life. From the above, it is possible to verify successful experiences, such as the implementation of a Standard Operating Procedure (SOP), as a fundamental way to guarantee a standardized routine, mainly in the context of primary health care, strengthening quality care, bringing security to professionals and users of health services, especially those seeking dental care.

### **Audience Take Away Notes**

- Dentistry is evolving towards a better knowledge in relation to the aspects of providing quality and patient safety, however, the need to promote further discussions about the topic of patient safety in Dentistry is explicit, with the aim of helping the systematization and organization of the provision of care both in the public sphere and in the private network
- The implementation of Standard Operating Procedure (SOP) protocols proved to be essential to guarantee a standardized routine, especially in the context of primary health care
- Undoubtedly, this work can and should be tested and implemented in different Brazilian municipalities, as well as in other cities around the world

- Without a doubt, it provides information and reports of successful experiences that can simplify the organization of flows to obtain safe and quality care
- With the dissemination of the results obtained in this project, it will facilitate the implementation in other municipalities and service networks

**Biography**

Dr. Fernanda Bijella graduated in Dentistry from the University of Sacred Heart, is a specialist in Public Health from the University of Brasilia, and completed her Master's and Doctorate in Pediatric Dentistry at FOB-USP. She was a professor at the Aparicio Carvalho University Center from 2005 to 2017 and in 2018 took over the coordination of the Dentistry course at UNIRON. From 2011 to 2018, she worked as a Pediatric Dentist in the Brazilian Army (HGU-PV) and is currently an employee of the Municipal Health Department of Porto Velho (SEMUSA-DSB) and a Tutor of the PlanificaSUS Project.



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*"We wish to meet you again at our  
upcoming events next year..."*

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