

6th Edition of International Conference on

DENTISTRY AND ORAL HEALTH

AUGUST 2022

11-12

VIRTUAL EVENT

Contact us:

Ph: +1 (702) 988-2320

WhatsApp: +1 (440) 941-2981

Email: dental@magnusconference.com

Website: <https://dental-conferences.magnusgroup.org/>

BOOK OF ABSTRACTS

6TH EDITION OF INTERNATIONAL
CONFERENCE ON

**DENTISTRY AND
ORAL HEALTH**

11-12 AUGUST

INDEX

Contents

About Host	4
About ICDO 2022	5
Keynote Presentations - Day 1	6
Oral Presentations - Day 1	10
Poster Presentations - Day 1	35
Keynote Presentations - Day 2	37
Oral Presentations - Day 2	39
Participants List	63

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 conference 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 ICDO 2022

Through our initiatives in dental education and research, Conferences organized by Magnus Group on Dental and Oral Health is one of the major professional gatherings dedicated to improving dental and oral health by supporting advanced science-based evidences. Since its inception, ICDO has been dedicated to its tagline of connecting dental and oral experts around the world through knowledge sharing and mutual cooperation for incubation.

We are thrilled to state the fact that after 5 highly successful annual conferences on dentistry and oral care, we are now pleased to welcome you all to the “6th Edition of International Conference on Dentistry and Oral Health (ICDO 2022)” during August 11-13, 2022 (Online Event).

The congress main theme is to present unique ethical and responsive techniques to all researchers in regard to dental cases and future medical care in dentistry, as well as to deal with the most up-to-date research and it strives to provide a meaningful theme of “Investigating the Latest Trends in Dentistry for Vibrant Smiles and a Healthy Lifestyle.”

Dentistry is the study, analysis, prevention, and treatment of illnesses, disorders, and conditions of the oral cavity, including the dentition but also the oral mucosa, as well as end-to-end and related structures and tissues, notably in the maxillofacial (jaw and facial) area. Although most people associate dentistry with teeth, the field of dentistry, often known as dental medicine, encompasses other components of the craniofacial complex. The congress is a platform dedicated to the development and dissemination of dental and oral health knowledge. We cordially invite all distinguished researchers, students, and delegates to join us in seeing the valuable scientific conversations and contributing to the longer-term developments in the field of dentistry and oral care and the summit is designed to give dentists, researchers, scientists, academicians, healthcare experts, oral care professionals and industrialists with clinically relevant, evidence-based knowledge on topics that may impact their practise.

Recommended Dental Conferences: Dental Conferences 2022

I Dental Conference I Oral Health Conferences I Dental

Meetings I Oral Health Conferences 2022



KEYNOTE FORUM

DAY 01

6TH EDITION OF INTERNATIONAL
CONFERENCE ON

DENTISTRY AND ORAL HEALTH

11-12 AUGUST



Bennete Aloysius Fernandes

SEGi university, Malaysia

Diabetes and Oral Health - A transdisciplinary approach

Diabetes is a chronic lifestyle disease affecting with global proportions. The global prevalence of diabetes in the adult population has nearly doubled since 1980, rising from 4.7% to 8.5%. On the other hand, periodontal diseases affect up to 90% of adults globally, with the reversible form, gingivitis, affecting almost everybody. is the 12th of 291 most prevalent diseases worldwide, with “severe” periodontitis being the sixth most prevalent disease, affecting 11.2% of adults. Periodontal disease is also considered the 6th complication of diabetes. There is a bi-directional link between the two which has been well established in the literature. A much greater proportion of people with diabetes suffer from periodontitis, and the severity of periodontitis is much greater, especially in poorly or uncontrolled diabetic individuals. The 2017 classification of periodontal and peri-implant diseases and conditions introduced for the first time the glycated haemoglobin assay levels as part of the diagnosis. People with diabetes have limited oral health knowledge and poor oral health behaviours. It has been shown how effective periodontal care helps diabetic individuals. Considering the impact of periodontal disease on diabetes and benefits of good oral health practices to minimise the risk of periodontal disease, it is important to ensure that people with diabetes are motivated to engage in good oral hygiene behaviours and are provided risk assessment and dental referrals as a part of routine diabetes care. The traditional mindset has been to tackle both diseases at best interdisciplinarily. However, a translational model is more effective. This presentation will highlight the 2017 classification, the risk factor approach, and also throw some light on how such a model can effectively manage diabetes.

Biography

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



Laurindo Moacir Sassi

Evangelical University Hospital Mackenzie, Brazil

Microvascularized fibula and their employment in the reconstructions of jaws

Face tumors make us more sensitized due to 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 the cancer in the region of the head and neck, which motivates the development of new reconstruction techniques. Reconstructions with micro vascularized fibula retail are a routine in our institution, so this makes that we seek alternatives to give better comfort to our patients, covering functionality and aesthetic issues.

Objective: Our goal was to show the solution that we found for the outcome of reconstructions with micro vascularized fibula retail in large defects in jaws and adjacent structures and especially in patients requiring radiotherapy.

Method: Patients who 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.

Conclusion: These variables in the reconstruction technique of the fibular micro vascularized retail have raised a satisfactory result in aesthetics, radiographic, function and in bone neoformation between the new segments of the fibula in the recommendation of the defect left by the tumor.

Biography

Laurindo Moacir Sassi holds a degree in Dentistry from the Federal University of Parana (1988), a Master's degree in Medicine (Head and Neck Surgery) from Hospital Heliopolis - Care Management Unit 1 (1995) and a PhD in Health Sciences from the Federal University of São Paulo (2009). He is currently a former postgraduate professor at the Federal University of Parana, a member of the clinical staff at the Evangelical University Hospital of Curitiba and head of service - League for the Fight against Cancer. Has experience in Dentistry, with emphasis on Oral and Maxillofacial Surgery, working mainly on the following subjects: case report, salivary glands, mandible, oral cancer and radiotherapy.



David G Gillam

Queen Mary University of London, United Kingdom

The use of Chemotherapeutics in Dental practice: An overview

The use of both therapeutic and cosmetic products is widely used in dentistry and these products may play an adjunctive role in maintaining oral health. For practical purposes these products can be placed into the following categories, namely: 1) dental caries prevention, 2) reduction of sensitivity, 3) reduction of calculus formation, 4) formation, reduction of gingivitis, and 5) tooth whitening effect(s). The use of chemical rinses for the prevention and/or control has been documented in the published literature and have been beneficial in reducing the impact of oral bacteria prior, during and following treatment. There are several therapeutic rinses that have been used for home use and these include 1) Phenolic-Related Essential Oils, 2) Triclosan, 3) Chlorhexidine, 4) Quaternary Ammonium Compounds (Cetylpyridinium Chloride), 5) Oraldene, 6) Paradontax, 7) Miscellaneous including herbal extracts, Chlorine Dioxide, oxygenating agents, enzymes, metal salts. The efficacy of these products as reported in the published literature will be reviewed to determine whether any claims associated with these products can be supported. The information included in this presentation may be used as a resource when discussing which products would be beneficial in the treatment of dental conditions.

Audience Take Away

- To provide an overview of the various toothpaste and mouth rinse products that are available for patient use.
- To provide sufficient information to address most of the questions your patients may have regarding these products.
- To evaluate the claims of efficacy of selected products.

Biography

I graduated from Edinburgh Dental School in 1977 and have been involved in Dentistry over the last 40 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 and currently I am a 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-). My main research interest is in the Management of Dentine Hypersensitivity, and 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.

SPEAKERS

DAY 01

6TH EDITION OF INTERNATIONAL
CONFERENCE ON

DENTISTRY AND ORAL HEALTH

11-12 AUGUST



Joanna Kociubinska

Glasgow Dental Hospital, United Kingdom

Covid 19: The impact of the new non-AGP protocol on the bracket failure rate in the Orthodontic Department at Dumfries and Galloway Royal Infirmary

Aim: This project looks at the impact of the new non-AGP protocol on the bracket failure rate in the Orthodontic Department at Dumfries and Galloway Royal Infirmary. Literature search and previous audit looking at bracket failure rate was taken into account to agree on standard.

Gold standard- was set at no more than 6%. This project consists of retrospective audit and first cycle of prospective audit. In the retrospective audit bracket bonding failure rate was analysed while using protocol that strictly follows manufacturer instructions, thus generating aerosols. Prospective audit analyses bracket bonding failure with amended bond-up protocol which avoids creating aerosols.

Materials and methods: All patients with full or sectional bond-ups in the analysed period of time were included in the audit. 22 patients who had full or sectional bond-ups provided between 01/09/2019 to 31/12/2019 were included in the retrospective audit cycle. 24 patients with full or sectional bond-ups provided between 01/09/2020 and 31/12/2020 were included in the first prospective audit cycle. Patients in both audit cycles were followed up for 3 months.

Results: Retrospective audit: The Gold Standard was met in the retrospective audit. 290 brackets were bonded in the retrospective audit cycle. 15 brackets debonded within the first 3 months following bond-up. This gives bracket failure rate at 5.2% in 3 months following bond-up when using AGP protocol.

1st cycle of prospective audit: The Gold Standard wasn't met in the first cycle of the prospective audit. 231 brackets were bonded using amended bond-up protocol between September and December 2020. 17 brackets debonded within the first 3 months following bond-up. This gives bracket failure rate at 7.4%, which exceeds Gold Standard figure.

Conclusion: Although we cannot be absolutely certain that patients' compliance hasn't contributed to the results due to the incomplete data, an increase in bracket failure was observed when Covid-19 pandemic led bond-up protocol, avoiding aerosol generating procedures was introduced.

Biography

Joanna is a dentist who has decided to go back into further training, following career as a General Dental Practitioner. She is a member of the Royal College of Surgeons of England. Currently she works as a Dental Core Trainee in the Restorative Department at Glasgow Dental Hospital. She is particularly interested in the links between restorative dentistry and orthodontics in order to create aesthetic outcomes for patients.



John Watt* and Tara Lee

Musgrove Park Hospital, United Kingdom

Primary care orthodontic referrals to hospital services and their usage of orthodontic indices

Background: In England patients with complex/multidisciplinary orthodontic needs can be referred and treated in a hospital setting. Finances for such services are limited, therefore the orthodontic indices, index of orthodontic treatment (IOTN), can be used by dentists on assessment in order to grade which patients are suitable for these services. However, inaccurate referrals still occur and can increase waiting times for patients and put unnecessary administrative pressure on staff. It is therefore important hospital orthodontists liaise with their local primary care dental colleagues to ensure effective and timely patient management occurs.

Objective: To assess the quality, accuracy and suitability of dental referrals to secondary care orthodontic departments at Musgrove Park & Yeovil Hospital.

Methods: Data was collected from 119 patients who were referred within a 3-month period to these hospitals orthodontic departments. Data was collected using patient medical records and analysed.

Results: In total, 36/119 (30.25%) of referrals during this timeframe were rejected. The majority (80.65%) came from general dental surgeons, but rejections did come from specialist orthodontists in a primary setting (13.89%) as well as in orthodontists in hospital and dental access centres (2.78% each). The reasons for rejection included 'suitability for specialist practice' (58.33%), 'too early for referral' (16.67%), 'not enough information' (16.67%), 'wrong specialism' (2.78%) and 'geographic reasons' (2.78%). From the rejected referrals, 28.13% of the IOTN scores recorded were found to be incorrect. With the majority (88.88%) being from general dentists.

Conclusion: IOTN is not always used correctly, and many dentists may struggle to understand the difference between hospital and primary care orthodontic treatment. Further training and support should be given to local primary care dentists to correctly use IOTN and where to appropriately refer orthodontic cases.

Biography

John qualified as a dental surgeon in England from the University of Central Lancashire (UCLAN), he has also been awarded a Biological & Medicinal Chemistry degree with honors from the University of Exeter. After graduating he has continued with his education and training which has recently resulted to being awarded membership to the Royal College of Surgeons in England. John currently resides in Somerset, where he works as a senior house officer in oral & maxillofacial surgery at a general district hospital. He has a keen interest in interdisciplinary links between specialties of dentistry; particularly oral surgery and orthodontics, including the management of these patients and how quality of patient care can be improved.



Ioana Chifor^{1,2*}, Elisa Ariatna Vazquez Paz^{3,4}, Lois Vazquez⁵, Alexandru Nap⁶, Doina-Iulia Rotaru^{2,7}, Carina Culic⁷, Meda-Romana Simu⁸, Alexandru Florin Badea⁹, Ismael Rodriguez-Cal⁵

¹Department of Preventive Dentistry, University of Medicine and Pharmacy “Iuliu Hatieganu”, Cluj-Napoca, Romania

²SC CHIFOR MEDDENT SRL, Cluj-Napoca, Romania

³CT ingenieros, Spain

⁴Applied Mathematics Department, School of Telecommunications Engineering, University of Vigo, Spain

⁵INDOMINUS AS S.L, Vigo, Spain

⁶SC NOVS ARCHITECTURE SRL, Cluj-Napoca, Romania

⁷Department of Odontology, University of Medicine and Pharmacy “Iuliu Hatieganu”, Cluj-Napoca, Romania

⁸Department of Pediatric Dentistry, University of Medicine and Pharmacy “Iuliu Hatieganu”, Cluj-Napoca, Romania

⁹Department of Anatomy and Embryology, University of Medicine and Pharmacy “Iuliu Hatieganu”, Cluj-Napoca, Romania

Mathematical modelling for optimized implantology procedures

Dental FEM aims to be the first software tool in the market for optimized implantology procedures based on mathematical methods.

Methods: For each clinical case, based on bimaxillary Cone-Beam Computer Tomographies (CBCT) with voxel size less than 0.3mm, including the whole mandible and the subnasal point, an accurate digital replica of the patient’s oral cavity (digital twin) was created and forces acting on implant, teeth and jawbone were obtained by means of numerical simulations based on the Finite Element Method (FEM). Different implant types and acting forces can be computationally tested. For 12 implant sites, treatment choices made by one prosthodontist (P group) and two senior implantologists (I1 and I2 group) were compared, in search for the best implant position resulted from FEM analysis (F group) and with the actual clinical choice as confirmed by intraoral scanning with specific scan-bodies (C group). The selected implants geometries were imported into the open-source software Meshmixer and in the DentalFEM web-platform and deviation angle, slopes compared to the mesial and distal tooth long axis, were measured for each clinical case between the 4 choices (P, I1, I2 and F group).

Results: Anonymized CBCT scan of each patient was used to perform segmentation on relevant structures carried out by means of Machine Learning. Thus, a 3D digital twin of patient’s oral cavity was obtained. The virtual oral cavity was discretized using a mesh. Structural response of the implant-supported prosthetic tooth was obtained by solving solid mechanics equations with FEM. DentalFEM software developed in this project, produced data related to the mechanical performance of the implant placement (stress/strain, safety coefficient) after obtaining watertight, closed surface geometries for implant screws, abutments and provisional crowns by remeshing the whole surface geometry. The remeshing was done using the fTetWild library developed at New York University. Because a Finite Method Volume solver works much better with hexahedrons, it was decided to use these, seeing even less changing of the native grid generator to one that will be necessary for a format conversion to be readable by DentalFEM solver. In order to automatize the implant screw-abutment-crown assembly building-up, a script was done within Grasshopper (visual programming plugin for Rhino). It allows to access Rhino’s commands (vectors, math, sets, NURBS and mesh topology tools, etc.) and string them together in a “data flow programming” manner using data trees.

Conclusions: Using DentalFEM, the result of an implant procedure will be no longer based only on intuition, but on quantitative and qualitative information relying on physics and mathematics.

Audience Take Away

- Treatment planning for implant-supported prosthesis can be very much improved and communication within medical team can be easier if more specific software is employed.
- Digital workflow in dentistry becomes almost mandatory and yet treatment planning is based mainly on clinical experience and intuition of the dentist. The Dental FEM presentation will include a step-by-step simplified digital workflow protocol.

**Mohamed El-Amin**

NHS, United Kingdom

Serious airway compromise in rare presentation of posterior tongue base abscess

This is a rare case report of 37 years old lady presented with acute airway compromise after presenting a few times to the emergency department with worsening sore throat and been treated for tonsillitis. Patient oral examination was difficult due to severe trismus but no signs of tonsillitis. Naso-endoscopic examination showed severe swelling of the base of the tongue without any significant signs of recent trauma or other signs of the acute inflammatory process. Imaging showed large posterior tongue base abscess. Drainage of the abscess was achieved through the external approach. The patient recovered well and was discharged home on oral antibiotics. The condition was related to patent foramen caecum of small area which led to abscess formation due to canalisation of bacteria with no obvious source of trauma or oral infections. In most cases the area involved is anterior part of the tongue. This case report will add to the understanding of the pathophysiological process of such usually sterile area of the tongue at the base.

Biography

Mohamed El-Amin is a graduate of Faculty of Medicine Khartoum University Sudan. He joined the higher specialist training for ENT surgery in the UK. He is a faculty member of the teaching committee with the Royal College of Surgeons.



Mihajlo Petrovski

Goce Delcev University, Macedonia

Influence of Er: YAG laser on root surface during periodontal therapy

During the complex pathogenesis activities caused by periodontal disease, the tooth root surface undergoes a numerous change in physical and chemical structure, but also becomes cytotoxic due to the release of bacterial toxins that are embedded in the cementum of the tooth root. The main goal of periodontal therapy is to eliminate the infection and achieve healthy periodontal environment by removing bacterial deposits of dental plaque, dental calculus and the presence of subgingival concretions and endotoxins from the root surface. The ultimate goal of all periodontal procedures is to make the treated root surface biologically compatible with the host's periodontal tissues and to enable proper healing of the periodontium. During the initial periodontal treatment, mechanical debridement is performed on the periodontally compromised root surface to eliminate all calcified deposits (supra- and subgingival concretions), as well as bacteria and their endotoxins to restore the biological compatibility of the root to the disease. There are two basic therapeutic modalities in periodontology - conventional and laser-assisted therapy. Er: YAG is most common used laser that works in the field of infrared wavelength (2,940 nm). Due to its high absorption in water and hydroxyapatite, several studies have shown the effectiveness of this laser in the ablation of hard and soft tissues and its bactericidal effects with little or no pain in clinical application confirm the numerous advantages of this laser. Er: YAG laser is one of the most spectacular types of lasers that can be used in periodontal therapy. Its effectiveness in removing the softened and pathologically altered parts from cement and in smoothing the root surface has been proven in vitro studies. The latest scientific evidence suggests that the use of Er: a YAG laser wavelength in the treatment of chronic periodontal disease is equivalent to ultrasound and manual instrumentation of periodontal pockets. Taking into consideration the complex pathological changes, as well as the complexity of reparative and regenerative processes conditioned by the surface interface of the hard wall of the periodontal pocket, the aim of this presentation was to evaluate the morphological and chemical characteristics of tooth cement after application of different periodontal therapeutic modalities. The results of the conducted SEM analysis indicate that after conventional treatment there is advanced, while in laser treated areas there is moderate surface alteration. Based on the results, it can be concluded that after the laser-assisted therapy, the surface roughness as a component of the topographic texture of the cement is very similar to that of healthy teeth. Also, there is a significantly greater reduction in the thickness of the cement after the conventional treatment compared to the laser assisted periodontal therapy. It can be concluded that the root surfaces after the laser-assisted therapy show a greater morphological and chemical similarity with healthy root surfaces than the root surfaces treated with conventional therapy.

Audience Take Away

- The author wants to present the effects of conventional and laser-assisted periodontal therapy on the micro- and nanodimensional characteristics, as well as the chemical changes of the cementum of the root surfaces of teeth affected by chronic periodontitis. The values for the given parameters are compared with those of untreated healthy root surfaces which are assumed to offer the best properties and the most favorable micro-mechanical environment for the normal periodontal healing process.
- All findings in the presentation indicate that there is essential importance of the nanostructure and chemical characteristics of the root surface and it can be noted that the application of laser-assisted root surface treatment can contribute to the design of an appropriate biomimetic root surface as a prerequisite for the expected reparation/regeneration after treatment of periodontally affected teeth. We believe that the obtained results will make a scientific contribution in the field of modern therapy of periodontal disease and will confirm the scientific findings, which

indicate that the use of laser light gives greater benefit in the healing of the periodontium after the therapy. The conclusions of this presentation are important both for the clinical dentists and for supplementing the scientific knowledge for the effect of different therapeutic modalities in the periodontology on the topographic-orphological nanodimensional and chemical characteristics of the root surface. By determining the thickness of the remaining cement of the treated teeth, it was determined that the degree of invasiveness in the conventional one is higher in relation to the laser-assisted periodontal therapy. Finally, it is noticeable that laser-assisted periodontal treatment has advantages over conventional therapy. This gives a significant scientific contribution that will have significance in everyday dental practice. The presented conclusions will contribute to solving the complex dilemmas that dentists have about the superiority and opportunities that lasers provide in everyday dental practice. Finally, technological advances and enhancements have increased the possibilities of available laser systems for their use in everyday dental practice. Among them, the laser devices that produce Er: YAG laser beams seem to have a promising use and are considered to become an indispensable tool in modern dentistry.

Biography

Mihajlo Petrovski, DDM in December 2013, Dr. Mihajlo Petrovski become Master of Dental Sciences (“Oral health in institutionalized elderly”). In November 2021, become specialist in periodontology. He enrolls PhD studies in the academic year 2017/2018 in the field of Basic and Clinical Research in Dental Medicine (“Analysis of micro-topographic and chemical characteristics of the root surface of the tooth after conventional and laser assisted periodontal therapy”) and in 2021he becomes PhD in Dental Sciences. In May 2017, Dr. Mihajlo Petrovski becomes teaching assistant at the Faculty of Medical Sciences at University “Goce Delchev” in Stip.



Olivera Terzieva-Petrovska
Goce Delcev University, Macedonia

Periodontal health in patients with orthodontic retainers

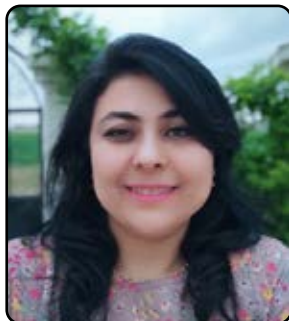
Different orthodontic appliances can cause periodontal inflammation. Fixed retainers, most commonly used orthodontic appliance to stabilize dental elements after orthodontic treatment can influence on the periodontal health, too. The main aim of this study was to make assessment periodontal tissue health status on lower incisors of patients with fixed mandibular retainers using objective periodontal indexes. Total numbers of 60 subjects, 30 male and 30 female patients with fixed mandibular retainers were included in this study. Before placing the retainer, an oral hygiene session and adequate periodontal treatment (if there was need) were performed on all patients. All the subjects were investigated after 3, 6 and 12 months. Plaque index by Silness & Loe; Gingival index (GI) by Loe & Silness, probing depth, clinical loss of attachment and the presence of gingival recession were assessed on the six inferior frontal teeth. Results showed that the mean score for the Plaque Index (PI), after three months was 1.04, after six months was 1.28 and after 12 months was 1.55. The mean Gingival Index (GI) after 12 months was 1.74 and after three months was 1.12. Periodontal sockets and presence of gingival recession were found in just one patient (1.66 % form all subjects) in all three examined periods. In our study was found a statistically significant difference for the Plaque Indexes ($P > 0.05$) in both groups, with higher scores among subjects having retainers for 12 months. These results are similar to those for the gingival index. From the results obtained in this study, it can be concluded that for a period from 3, 6 to 12 months, even there are effects of the orthodontic retainers on the periodontal health, they are minimal.

Audience Take Away

- Listeners to this presentation will receive information about the condition of the periodontal tissues of the lower frontal teeth after wearing a fixed retainer. Raising the awareness of orthodontists to improve and preserve periodontal health is most important goal in people with orthodontic appliances. By proving the deteriorating periodontal health in the long-term wearing of fixed retainers, the insufficient attention of the clinician to the periodontal as a whole is pointed out in this presentation. Finally, it should be noted that listeners will also receive information on how to improve oral hygiene and periodontal health.

Biography

Olivera Terzieva- Petrovska participates in education of students at the Faculty of Medical Sciences at the University "Goce Delcev" in Stip, as a specialist in the practice of dental medicine program. She works in private dental offices as general practice dentist. She is the author or co-author of more than 20 scientific papers or presentations published in international journals or professional or scientific meetings. Also, Dr.Terzieva- Petrovska is the author of textbook for Geriatric dentistry. Currently she is on specialization in orthodontics.



Hilal Erdogan

Nevsehir Haci Bektas Veli University, Turkey

An overview of the microbiology of root canal infections

Root canal treatment is a dental procedure that is applied to teeth whose pulp is irreversibly damaged and inflamed for various reasons and aims to save the natural tooth. Endodontic treatment is a multi-stage procedure, during which the infected pulp is removed, the root canal is carefully cleaned and disinfected, then sealed. Microorganisms play an important role in the development and maintenance of endodontic infection. Root canal infections are a dynamic process, and the dominant species differ at different stages of infection. The number of microorganisms in the canal, microbial virulence, and host responses affect the degree of periapical inflammation and symptoms. Therefore, successful endodontic treatment depends on the effective removal of microorganisms from the root canal system. Recent microbial detection methods provide increasing information about the microbial species associated with endodontic infections and their roles. Knowing the specific bacterial species involved in pulpal and periapical pathology and the mechanisms by which bacteria maintain inflammatory lesions will facilitate rational treatment for microbial elimination and increase the success of endodontic treatment. This presentation aims to review the microbiology of endodontic infections with emphasis on the recent taxonomy, pathways, pathology, virulence, and clinical effects. Thus, it will help to gain a perspective on developments in this field.

Audience Take Away

- To provide participants with a comprehensive literature review on the microbiology of root canal infections.
- To raise awareness of the participants about the importance of the elimination of microorganisms from root canals.
- To provide participants with an update on the novel taxonomy of microorganisms.
- To summarize the characteristics of an ideal bactericidal root canal irrigation solution and discuss whether it can be realistically achieved for consumer use.
- To provide participants with an update on the novel microbial detection methods that are being developed for endodontic diseases.
- To introduce participants to specific bacterial species associated with endodontic infections.
- To raise awareness of participants about rational treatment for microbial elimination in clinical practice.

Biography

Hilal Erdogan graduated from Selcuk University Faculty of Dentistry, Konya Turkey, and obtained her Doctor of Dental Surgery (DDS) degree in 2009. Subsequently, she completed a Ph.D. program at Selcuk University Faculty of Dentistry Department of Endodontics, Konya, Turkey in 2016. She worked at the Ministry of Health Oral and Dental Health Hospitals as an endodontist until 2019. She has been working as an Assistant Professor Doctor in the Department of Endodontics, Faculty of Dentistry, Nevsehir Haci Bektas Veli University, Nevsehir, Turkey since 2019 and the head of the endodontics department. She is a member of the Turkish Endodontic Society. Dr. Erdogan has publications in national and international journals related to her specialty and attends many national and international conferences.



Lohana Maylane Aquino Correia de Lima^{*1}; Frederico Marcio Varela Ayres de Melo Junior²; Julia de Souza Beck³; Victor Leonardo Mello Varela Ayres de Melo⁴; Maria Luísa Alves Lins⁵; Rodrigo Henrique Mello Varela Ayres de Melo⁶; Deise Louise Bohn Rhoden⁷; Milena Mello Varela Ayres de Melo Pinheiro⁸; Jussara Diana Varela Ayres de Melo⁹; Nely Dulce Varela de Melo Costa Freitas¹⁰; Esdras

Marques da Cunha Filho¹¹; Anna Luiza Konig Hunka¹²; Bruna Heloísa Costa Varela Ayres de Melo¹³; Rayane Pereira de Araújo¹⁴; Evellyn Maria Silva De Almeida¹⁵; Edith Maria Feitosa El-Deir¹⁶; Thayná Lacerda Almeida¹⁷; Zélia De Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Lucas Alexandre De Moraes Santos²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²Dental Surgeon, Federal University of Pernambuco – Recife, Pernambuco, Brazil.

³Undergraduate dental student, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

⁵Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

⁶General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil.

⁷Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil.

⁸Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

⁹Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil.

¹⁰Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil.

¹¹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

¹²Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil.

¹³Undergraduate dental student, UNIFACEX – Natal, Rio Grande do Norte, Brazil.

¹⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁶Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁷Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru.

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru.

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraíba, Brazil.

²²College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²³Physiotherapist at University open of Therapist- Pernambuco, Brazil.

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

Surgical excision of polymorphous adenocarcinoma in the left maxilla with mucous flap reconstruction

Introduction: Low-grade polymorphous adenocarcinoma is a malignant neoplasm of salivary glands with uncommon occurrence in the head and neck region. The lesions occur more frequently among elderly females between the sixth and eighth decades of life, with a higher prevalence for the hard palate and soft palate. The most indicated surgical treatment is extensive surgical excision, including resection of the underlying bone. The purpose of this study is to describe a case report of a surgical excision of polymorphous adenocarcinoma in the maxilla with mucous flap reconstruction.

Case Report: A 63-year-old male patient complaining of a tumor-like lesion in his left maxilla, which gradually increased in volume. At the intra-oral clinical examination showed the presence of upper and lower total dentures, an increase in volume in the left maxillary tuberosity region and a lesion of nodular features with fibrous and smooth consistency, fixed, sessile, oval shape, defined edges, and painless symptomatology. Radiographic imaging by panoramic radiography revealed a lesion with mixed radiographic density projected in the left maxillary tuberosity region and the in computed tomography scans were obtained and used for 3D image reconstruction. An axial tomographic view indicated the presence of a heterogeneous lesion with osteolysis: alteration in the cortical/trabecular bone and reabsorption of the left palatine bone, with regular contour and defined edges. Given the extent and complexity of the lesion, the surgical treatment in this case consisted of hemimaxillectomy and the surgery proceeded with mucosal flap reconstruction. The postoperative period followed was the service protocol, with no complications and no sign of recurrence. The pathological specimen was sent to the Anatomopathological Service, where the free margins and diagnosis were confirmed.

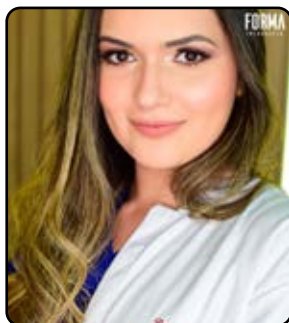
Conclusion & Significance: The low-grade polymorphic adenocarcinoma is a rare malignant neoplasm that affects the salivary glands whose potential for malignancy, recurrence and metastasis are relatively low.

Audience Take Away

- Definition of Adenocarcinoma.
- Clinical and histopathological characteristics of Oral Adenocarcinoma.
- Forms of treatment.
- Description of a surgical clinical case.
- The dental surgeon must know how to identify neoplasms and their forms of treatment, avoiding worse stages of pathologies.

Biography

Dental Surgeon and Master's student in integrated clinics at the Federal University of Pernambuco, Brazil; Currently, she is an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco, being a member of the projects care for patients with oral diseases and facial traumas, the project prevention and treatment of cancer in face and mouth regions in Venturosa-Pernambuco-Brazil and the project intitled Use of Traditional Chinese Medicine in the treatment of patients with temporomandibular disorders. In 2019 was invited by the Peruvian Army to give a conference at the 30th National Congress of Military Police Dentistry "Ejército del Perú". In 2020 and 2021, she won several awards for presentations of scientific works and was International Keynote speaker in the United States, France and England.



Bruna Heloísa Costa Varela Ayres de Melo^{*1}; Frederico Marcio Varela Ayres de Melo Junior²; Julia de Souza Beck³; Victor Leonardo Mello Varela Ayres de Melo⁴; Maria Luísa Alves Lins⁵; Rodrigo Henrique Mello Varela Ayres de Melo⁶; Deise Louise Bohn Rhoden⁷; Milena Mello Varela

Ayres de Melo Pinheiro⁸; Jussara Diana Varela Ayres de Melo⁹; Nely Dulce Varela de Melo Costa Freitas¹⁰; Esdras Marques da Cunha Filho¹¹; Anna Luiza Konig Hunka¹²; Lohana Maylane Aquino Correia de Lima¹³; Rayane Pereira de Araújo¹⁴; Evellyn Maria Silva De Almeida¹⁵; Edith Maria Feitosa El-Deir¹⁶; Thayná Lacerda Almeida¹⁷; Zélia De Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Lucas Alexandre De Moraes Santos²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Undergraduate dental student, UNIFACEX – Natal, Rio Grande do Norte, Brazil.

²Dental Surgeon, Federal University of Pernambuco – Recife, Pernambuco, Brazil.

³Undergraduate dental student, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

⁵Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

⁶General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil.

⁷Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil.

⁸Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

⁹Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil.

¹⁰Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil.

¹¹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

¹²Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil.

¹³Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁶Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁷Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru.

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru.

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraiba, Brazil.

²²College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²³Physiotherapist at University open of Therapist- Pernambuco, Brazil.

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil

Surgical treatment for maxillary sinusitis using the Caldwell-luc technique

Introduction: The maxillary sinus can be affected by several recurrent sinus pathological processes, including sinusitis of odontogenic origin. This pathology is characterized by hyperplasia or inflammation in the lining mucosa of the sinus associated with a necrotic dental element. Since, when associated with painful symptoms and/or significant expansion, it should be surgically removed. Thus, the Caldwell-Luc technique has been suggested as a means of access to the maxillary sinus, because it allows its inspection and the treatment of diseases that affect it. This technique has been used for the treatment of irreversible chronic maxillary sinusitis, removal of dental roots and foreign bodies.

Objective: The present study aims to report a clinical case of a patient with maxillary sinusitis of odontogenic origin, accompanied by a somewhat painful symptomatology where she had as surgical treatment of choice a maxillary sinusotomy using the Caldwell-Luc technique.

Case report: Female patient, 57 years old sought the Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco, complaining about the absence of dental elements, in which he reported that he lost at a young age due to infectious and inflammatory processes. He had constant headaches and the presence of purulent secretion leaving through the nasal region and constant pain in the middle third of the face. Panoramic radiography imaging showed the absence of multiple dental elements with two teeth included: one in the anterior region of the right maxilla and the other in the posterior region of the left mandible, with radiolucent images involving their crowns, with the diagnostic hypotheses of dentigerous cysts. There was a slightly radiopaque, homogeneous, dome-shaped alteration located on the floor of the left maxillary sinus. The patient's treatment was based on left maxillary sinusotomy of odontogenic origin and excisions of the right upper canine and left lower third molar, both included. The surgery was performed under general anesthesia for enucleation of the cyst in the maxillary sinus by the Caldwell-Luc surgical technique. The sample was referred for histopathological analysis at the Oral Pathology laboratory of the Hospital das Clínicas of the Federal University of Pernambuco, which confirmed the initial diagnosis. The patient responded well to the postoperative period with remission of painful symptoms and good healing.

Conclusion: It is concluded, therefore, that maxillary sinusitis of odontogenic origin will have its clinical treatment of choice: the cystic enucleation of the entire lesion through the Caldwell-Luc surgical technique. This diagnosis will be confirmed by combining the clinical examination for a detailed anamnesis, complementary tests and imaging tests.

Audience Take Away

- Learn about Treatment for Maxillary Sinusitis.
- Learn about a clinical case of a patient with maxillary sinusitis of odontogenic origin, accompanied by a somewhat painful symptomatology.
- Learn about an ancient technique that is very effective.

Biography

Dental School academic in UNIFACEX, BR; Currently, an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco. As a member of the project to care of patients with oral diseases and facial traumas, project entitled prevention and treatment of cancer in face and mouth areas in Venturosa-Pernambuco-Brazil, and Use of Traditional Chinese Medicine in the treatment of patients with temporomandibular disorders.



Edith Maria Feitosa El-Deir*¹; Frederico Marcio Varela Ayres de Melo Junior²; Julia de Souza Beck³; Victor Leonardo Mello Varela Ayres de Melo⁴; Maria Luísa Alves Lins⁵; Rodrigo Henrique Mello Varela Ayres de Melo⁶;

Deise Louise Bohn Rhoden⁷; Milena Mello Varela Ayres de Melo Pinheiro⁸; Jussara Diana Varela Ayres de Melo⁹; Nely Dulce Varela de Melo Costa Freitas¹⁰; Esdras Marques da Cunha Filho¹¹; Anna Luiza Konig Hunka¹²; Lohana Maylane Aquino Correia de Lima¹³; Rayane Pereira de Araújo¹⁴; Evellyn Maria Silva De Almeida¹⁵; Bruna Heloísa Costa Varela Ayres de Melo¹⁶; Thayná Lacerda Almeida¹⁷; Zélia De Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Lucas Alexandre De Moraes Santos²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

²Dental Surgeon, Federal University of Pernambuco – Recife, Pernambuco, Brazil.

³Undergraduate dental student, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

⁵Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

⁶General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil.

⁷Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil.

⁸Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

⁹Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil.

¹⁰Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil.

¹¹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

¹²Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil.

¹³Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁶Undergraduate dental student, UNIFACEX – Natal, Rio Grande do Norte, Brazil.

¹⁷Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru.

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru.

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraiba, Brazil.

²²College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²³Physiotherapist at University open of Therapist- Pernambuco, Brazil.

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil

Clinical and radiographic features and treatment of dentigerous cyst associated with unerupted molars: Case report

The dentigerous cyst is the most common developmental odontogenic cysts involved in this classification. It believes that originates at the separation of the fluid that is around the crown of an impacted tooth. This cyst is characterized for involving the crown of an impacted tooth and connects to the tooth in the cemento-enamel junction. This cyst most often affects the mandibular third molars. The most affected age group is from ten to thirty years old, with a slight preference for the male sex and higher prevalence of caucasians. The dentigerous cysts are generally small size and asymptomatic, but may in some cases reach a considerable size. Radiographically, there is a unilocular radiolucent image associated with the crown of an impacted tooth, with well-defined and often sclerotic margins. This work is a case report of dentigerous cyst associated with molars enclosed in a female patient of 20 years old. The patient searched treatment to the Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco - Brazil, after radiographic examination for orthodontic treatment. She did not complain of pain or bleeding, only a small increase in volume on the left side of the face. At radiographic evaluation, it was noticed the presence of radiolucence area suggestive of cyst at left maxillary second and third molar and right mandibular third molar, all enclosed. The surgical treatment performed was cystic enucleation. The diagnosis of dentigerous cyst was confirmed after histopathological examination. In this report we will discuss the clinical, radiographical, pathological and therapeutic case.

Audience Take Away

- Dental surgeons will be able to apply the knowledge presented in the paper in clinical practice, recognizing the characteristics of this cyst, which are extremely important for a correct differential diagnosis and subsequent treatment.
- It will help in the definitive treatment when the dental surgeons come across cases of dentigerous cysts, besides promoting post-operative follow-up, which is very important to verify the absence of signs of recurrence, by requesting periodic imaging exams.
- The research can be referenced in other works with the objective of expanding the knowledge about the case addressed.
- This is a case report of a cystic lesion common among cysts of developmental origin and the second most common among odontogenic cysts, this presentation will provide evidence about the lesion, in addition to presenting the treatment for the respective case, thus aiding the diagnosis and treatment of dentigerous cysts.

Biography

Student of the 7th period of Dentistry at the University Federal de Pernambuco - UFPE. Intern at the Oral Maxillofacial Surgery and Traumatology of the Hospital das Clínicas, Federal University of Pernambuco - UFPE. She is currently a volunteer in the extension entitled: Care of patients with oral diseases and facial trauma and the project entitled Prevention and treatment of cancer in the face and mouth regions in the city of Venturosa/PE. She also participates as a volunteer in the project for the use of Traditional Chinese Medicine in the treatment of patients with temporomandibular joint dysfunctions.



Evellyn Maria Silva de Almeida*¹, Frederico Marcio Varela Ayres de Melo Junior², Bruna Heloisa Costa Varela Ayres de Melo³, Júlia de Souza Beck⁴, Victor Leonardo Mello Varela Ayres de Melo⁵, Maria Luisa Alves Lins⁶, Rodrigo Henrique Mello Varela Ayres de Melo⁷, Deise Louise Bohn Rhoden⁸, Milena Mello Varela Ayres de Melo Pinheiro⁹,

Jussara Diana Varela Ayres de Melo¹⁰, Nely Dulce Varela de Melo Costa Freitas¹¹, Esdras Marques da Cunha Filho¹², Anna Luiza Konig Hunka¹³, Lohana Maylane Aquino Correia de Lima¹⁴, Rayane Pereira de Araújo¹⁵, Edith Maria Feitosa El-Deir¹⁶, Thayná Lacerda Almeida¹⁷, Zélia de Albuquerque Seixas¹⁸, Neme Portal Bustamante¹⁹, Juan Carlos Barrenechea Montesinos²⁰, Jorge Pontual Wakes²¹, Lucas Alexandre de Moraes Santos²², José Leonardo de Paiva e Souza²³, Ricardo Eugenio Varela Ayres de Melo²⁴

¹Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

²Undergraduate dental student, Maurício de Nassau University, Natal, Rio Grande do Norte, Brazil,

³Undergraduate dental student, UNIFACEX, Natal, Rio Grande do Norte, Brazil

⁴Undergraduate dental student, Maurício de Nassau University, Natal, Rio Grande do Norte, Brazil,

⁵Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

⁶Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil

⁷General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil,

⁸Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil,

⁹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil,

¹⁰Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil,

¹¹Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil,

¹²Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil,

¹³Undergraduate Medical Student, Tiradentes Integrated Faculty, Recife, Pernambuco, Brazil,

¹⁴Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

¹⁵Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

¹⁶Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

¹⁷Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru,

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru,

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraiba, Brazil,

²²College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

²³Physiotherapist, at university open of Therapist, Pernambuco, Brazil,

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

Excisions of 4 unerupted canines in the mentonian region of the mandible: “kisses teeth”

The impacted tooth is a dental organ that, even fully developed, did not erupt at the normal time, being inside of the bone tissue and totally surrounded by bone tissue or by bone and mucous tissue.

Objective: The aim of this paper is to present a clinical case, wich deals with an unerupted tooth in the metonian region and also the clincal and surgical manegment of this case.

Case report: Female melanodermic patient, 14 years old attended the Oral and Maxillofacial Surgery and Traumatology Service of the Federal University of Pernambuco, reporting mentonian discomfort, thus an imaging-based screening was requested. These symptoms were induced by two impacted canine teeth associated with other two supernumerary teeth that, radiographically resembled canines, surrounded by a radiolucent image similar to a dentigerous cyst in chin region, and also in a atypical position of “kisses teeth”. Throughout the anamnesis the patient reported absence of bilateral lower canines as well as absence of traumatic factors to this region and deciduous elements premature loss. Firstly, incisions were performed in both right and left parassinphyseal regions of the mandible, followed by displacements of mucoperiosteal flaps, osteotomies and ostectomies to approach the lesion. Then, aided by Seldin elevators, the uppermost elements on the right side were removed by means of lever points, and afterwards the left side was carefully managed in order not to injure the adjacent elements roots. As a result, the lesion involving the unerupted teeth was carefully removed through curettage so as not to damage the lower alveolar nerve vascular bundle, and this lesion was sent to perform the histopathological screening at the Oral Histopathology Laboratory of the Federal University of Pernambuco. The surgical sequence continued with cavity cleaning and bone regularization, repositioning the flaps and sutures with separate points through 5.0 mononylon wire. Over the postoperative period, the patient evolved without philogistic signs and after 1 year another facial (panoramic) radiography was requested for post-surgical control. Radiographically, the bone tissue healing in the region was observed, preserving the root apices of the inferior elements. Clinically, the patient presented with preserved tissues and all dental elements demonstrated pulp vitality.

Conclusion: This case reported a situation where the lower canines were impacted, together with supernumerary dental elements involved by a single dentigerous cyst. Due to this rare clinical occurrence, canines impacted in the mentonian region are less discussed in literature when compared to impacted upper canines given their lower incidence rates. This fact becomes important, both for surgical, pathological and radiological professionals, being the accomplishment of the correct diagnosis extremely important.

Audience Take Away

- Definition of dentigerous cyst.
- Forms of treatment.
- jaw anatomy.
- Description of a surgical clinical case.

Biography

Evellyn Almeida study dental medicine at the Federal University of Pernambuco - UFPE, Brazil. Currently an intern at the Oral Maxillofacial Surgery and Traumatology Service at UFPE. Extension volunteer whose project is care for patients with oral diseases and trauma at the Oral Maxillofacial Traumatology and Objective Outpatient Clinic of the Federal University - UFPE and the Project treatment of cancer in face and mouth regions in the city of Venturosa/PE. Volunteer in the project to extend the use of Traditional Chinese Medicine in the treatment of patients with temporom andibular joint disorders.



Frederico Marcio Varela Ayres de Melo Junior^{*1}; Bruna Heloísa Costa Varela Ayres de Melo²; Julia de Souza Beck³; Victor Leonardo Mello Varela Ayres de Melo⁴; Maria Luísa Alves Lins⁵; Rodrigo Henrique Mello Varela Ayres de Melo⁶;

Deise Louise Bohn Rhoden⁷; Milena Mello Varela Ayres de Melo Pinheiro⁸; Jussara Diana Varela Ayres de Melo⁹; Nely Dulce Varela de Melo Costa Freitas¹⁰; Esdras Marques da Cunha Filho¹¹; Anna Luiza Konig Hunka¹²; Lohana Maylane Aquino Correia de Lima¹³; Rayane Pereira de Araújo¹⁴; Evellyn Maria Silva de Almeida¹⁵; Edith Maria Feitosa El-Deir¹⁶; Thayná Lacerda Almeida¹⁷; Zélia de Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Lucas Alexandre de Moraes Santos²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Dental Surgeon, Federal University of Pernambuco – Recife, Pernambuco, Brazil.

²Undergraduate dental student, UNIFACEX – Natal, Rio Grande do Norte, Brazil.

³Undergraduate dental student, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

⁵Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

⁶General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil.

⁷Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil.

⁸Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

⁹Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil.

¹⁰Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil.

¹¹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

¹²Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil.

¹³Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁶Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁷Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru.

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru.

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraíba, Brazil.

²²College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²³Physiotherapist at university open of Therapist- Pernambuco, Brazil.

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil

Face injury caused by Dog bite

The bites that are of most interest to the dental surgeon is caused by domestic animals, especially dogs and cats. These injuries are of great importance, as they have a high rate of contamination and can cause some systemic diseases caused by bacteria, viruses, protozoa and parasites. Purpose: To clarify and explain possible differences regarding the treatment of these injuries.

Case report: Male patient, 3 years old, victim of physical aggression by a dog of his own family, was taken to the emergency room of the reference Hospital in Recife, state of Pernambuco, Brazil, under regular general condition, walking, conscious, oriented, afebrile and eupneic. On clinical examination, an extensive scalp wound was found, and a laceration as well as a contusion in the right preauricular area with profuse hemorrhage. Under general anaesthesia, the treatment was based on strict rinse with 0.9% saline and polyvinylpyrrolidone, the team performed the removal of foreign bodies, debridement of devitalized tissues and hemostasia of the blood vessels. Family members were instructed to observe the offending animal for 10 days. Tetanus prophylaxis was not indicated because the child was vaccinated. There were no postoperative complications and the wound healing achieved good results.

Conclusion: Bite wounds are treated a little differently than the other wounds, since they have saliva rich in microbiota, being highly susceptible to infection. As for the need for prophylaxis of human rabies, the patient should be referred to a specialized service, and the offending animal should be kept isolated from other individuals and animals.

Audience Take Away

- Learn about the procedures taken during the operation.
- Understand facial anatomy.
- Have a quick look in some trauma statistics.
- Learn about treatment and prognosis based on brazilian ministry of health on the prophylaxis treatment for rabies.

Biography

Frederico Melo Jr. is a Doctor of Dental Surgery, graduated from the Maurício de Nassau University, Natal Campus. Volunteer at the Oral Maxillofacial Surgery and Traumatology Outpatient Clinic of Hospital das Clínicas, Federal University of Pernambuco - UFPE and in the extension project whose objective is to care for patients with oral pathologies and facial trauma at the Oral Maxillofacial Surgery and Traumatology Outpatient Clinic of Federal University of Pernambuco - UFPE. Project participant entitled: Cancer prevention and treatment in face and mouth regions in the city of venturosa/PE.



Julia de Souza Beck^{*1}; Frederico Marcio Varela Ayres de Melo Junior²; Bruna Heloísa Costa Varela Ayres de Melo³; Victor Leonardo Mello Varela Ayres de Melo⁴; Maria Luísa Alves Lins⁵; Rodrigo Henrique Mello Varela Ayres de Melo⁶; Deise Louise Bohn Rhoden⁷; Milena

Mello Varela Ayres de Melo Pinheiro⁸; Jussara Diana Varela Ayres de Melo⁹; Nely Dulce Varela de Melo Costa Freitas¹⁰; Esdras Marques da Cunha Filho¹¹; Anna Luiza Konig Hunka¹²; Lohana Maylane Aquino Correia de Lima¹³; Rayane Pereira de Araújo¹⁴; Evellyn Maria Silva De Almeida¹⁵; Edith Maria Feitosa El-Deir¹⁶; Thayná Lacerda Almeida¹⁷; Zélia De Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Lucas Alexandre De Moraes Santos²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Undergraduate dental student, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

²Dental Surgeon, Federal University of Pernambuco – Recife, Pernambuco, Brazil.

³Undergraduate dental student, UNIFACEX – Natal, Rio Grande do Norte, Brazil.

⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

⁵Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

⁶General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil.

⁷Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil.

⁸Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

⁹Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil.

¹⁰Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil.

¹¹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

¹²Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil.

¹³Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁶Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁷Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru.

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru.

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraíba, Brazil.

²²College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²³Physiotherapist at University open of Therapist Pernambuco, Brazil.

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil

Traumatic neuroma in impacted third molar and the use of computed tomography for evaluation of lower alveolar nerve: Analysis of the literature and case report

Introduction: It is known that traumatic neuroma is caused due to the proliferation of a nerve, consequent to a rupture of its ligaments after surgery and/or injury to the head and neck region. It is diagnosed, above all, in middle age and shows a predilection for the female sex. Clinically it presents as a firm nodule so painful that it is usually seen in the area of the mentonian foramen, tongue and lower lip. The extraction of third molars is frequent, especially when it comes to the lack of space in them. The inferior scans may be related to the lower alveolar nerve, contributing to the increase of nerve injury during surgery. However, the use of complementary imaging tests is essential as prevention.

Objective: The objective of this study is to report the clinical case of a patient who developed a traumatic neuroma in the right mandibular region after exodontia of the third molar.

Case Report: Female patient, 26 years old, sought the Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco, reporting loss of sensitivity of the right lower lip. During anamnesis the patient reported that she had undergone an exeresis surgery of impacted teeth 3 years ago. On imaging (panoramic) examination, it presented rupture of the right lower alveolar nerve associated with a radiolucent mass. The patient underwent an incisional biopsy confirming the diagnosis of traumatic neuroma. Therefore, it is noted the importance of effective and accurate radiographic evaluation before extractions of the third molars, in order to avoid complications during surgery. Among the most used complementary tests are panoramic radiographs and tomographies, with their specific indications for different situations. The panoramic is very useful in identifying the anatomical variations presented by the mandibular canal. On the other hand, tomography is more efficient because it provides the image with a lower degree of distortion and three-dimensional, in addition, it has a lower radiation dose.

Conclusion: Computed tomography evaluation is important to highlight the nerves and thereby not injure them during extraction. It has been the most effective measure found today and consists of the correct diagnosis, anatomical and technical knowledge of the professional. The patient underwent an incisional biopsy confirming the diagnosis of traumatic neuroma. Therefore, it is noted the importance of effective and accurate radiographic evaluation before extractions of the third molars, in order to avoid complications during surgery.

Audience Take Away

- Learn about traumatic neuroma consequent to a rupture of its ligaments after surgery.
- The objective is to report the clinical case of a patient who developed a traumatic neuroma in the right mandibular region after exodontia of the third molar.
- Learn about the importance of effective and accurate radiographic evaluation before extractions of the third molars, in order to avoid complications during surgery.

Biography

Dental School academic in Maurício de Nassau University, BR; Currently, an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco. As a member of the project to care of patients with oral diseases and facial traumas, project entitled prevention and treatment of cancer in face and mouth areas in Venturosa-Pernambuco-Brazil, and Use of Traditional Chinese Medicine in the treatment of patients with temporomandibular disorders.



Maria Luisa Alves Lins¹; Victor Leonardo Mello Varela Ayres de Melo²; Frederico Marcio Varela Ayres de Melo Junior³; Julia de Souza Beck⁴; Anna Luiza Konig Hunka⁵; Lohana Maylane Aquino Correia de Lima⁶; Rodrigo Henrique Mello Varela Ayres de Melo⁷; Milena Mello Varela Ayres de Melo⁸; Jussara Diana Varela Ayres de Melo⁹; Nely

Dulce Varela de Melo Costa Freitas¹⁰; Esdras Marques da Cunha Filho¹¹; Bruna Heloísa Costa Varela Ayres de Melo¹²; Rayane Pereira de Araújo¹³; Evellyn Maria Silva De Almeida¹⁴; Edith Maria Feitosa El-Deir¹⁵; Thayná Lacerda Almeida¹⁶; Renata Araújo Varela Ayres de Melo¹⁷; Zélia De Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Filipe Cavalcanti de Andrade Lima Brito²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²Undergraduate dental student, Federal University of Pernambuco; Undergraduate Medical Student, Maurício de Nassau University - Recife, Pernambuco, Brazil.

³Dental Surgeon, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁴Undergraduate dental student, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁵Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil.

⁶Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

⁷General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil.

⁸Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

⁹Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil.

¹⁰Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil.

¹¹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

¹²Undergraduate dental student, UNIFACEX – Natal, Rio Grande do Norte, Brazil.

¹³Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁶Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁷Undergraduate Medical Student, Maurício de Nassau University, Recife, Pernambuco, Brazil.

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru.

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru.

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraíba, Brazil.

²²Physiotherapist; Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²³Physiotherapist at University open of Therapist- Pernambuco, Brazil.

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil

Resection of dermoid cyst in the retroauricular region. Case Report

Dermoid cyst is a developmental cystic malformation, described in the scientific literature as a benign teratoma, uncommon in the head and neck region. Most of them affect more commonly the floor of the mouth, being able to be located laterally or in other place. The etiology still uncertain, however, it is believed to be associated with ectoderm remnants trapped in the first and second branchial arches throughout the third and fourth weeks of intrauterine life. The characteristics of the dermoid cyst are slow and painless growth. Clinically, it presents itself as a nodule, with fluid or semi-solid content and soft to the touch. The lesion occurs more frequently in children and young adults, without predilection for sex. The definitive diagnosis is only obtained from the histopathological exam. The most indicated treatment is the complete surgical resection of the cystic material. When completely removed, there are no reports of recurrence. In about 1% of dermoid cysts, malignant transformation occurs. The present manuscript discusses the clinical and histopathological findings of a clinical case of dermoid cyst in a 16 years old male patient, melanoderma, who searched the Maxillofacial Surgery Service at the Federal University of Pernambuco, reporting approximately 3 years of the lesion evolution. The treatment adopted was the complete cystic resection.

Audience Take Away

- Definition of Dermoid cyst.
- Clinical and histopathological characteristics of Dermoid cyst.
- Forms of treatment.
- Description of a surgical clinical case.
- The dental surgeon must know how to identify neoplasms and their forms of treatment, avoiding worse stages of pathologies.

Biography

Dental Surgeon graduated from the Federal University of Pernambuco, Brazil; Currently, is student of the Specialization Course in Orofacial Harmonization of Stetic Face Akademy, accredited by the Ibero – American College of São Paulo – FIASP and the Improvement Course in Orthodontics by CPGO – Postgraduate Center in Dentistry. Is an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco, being a member of the project to care for patients with oral diseases and facial traumas, also a member of the project entitled Prevention and treatment of cancer in face and mouth regions in Venturosa-Pernambuco-Brazil and the project Use of Traditional Chinese Medicine in the treatment of patients with temporomandibular disorders. Won awarded for presentation of scientific works at national and international events and in 2020 and 2021. Was invited by Universidad Nacional Federico Villareal to give a conference at the XIII Congreso Internacional de Odontología and for I Jornada Internacional Multidisciplinaria de Estomatología Peruano Brasileira by Peruvian Army.

**Maria Elena Camargo Rique*¹ and Celia Mendiburu-Zavala²**¹Faculty of Dentistry, University of Montemorelos, Nuevo Leon, Mexico²Faculty of Dentistry, Autonomous University of Yucatan, Mexico**Tomographic analysis of the temporomandibular joint in patients with Arthritis**

Computed tomography imaging of the temporomandibular joint was carried out in 22 previously-diagnosed arthritis patients (3 men, 19 women). This descriptive, cross-sectional observational, qualitative study allowed to characterize the type of condylar morphology condition, the space between temporomandibular joint, the erosion of the cortical and osteophytes formation. The joint characteristics found were cortical erosion, osteophytes and decrease of joint space, which reveals, for the first time in the literature, a correlation between arthritis and temporomandibular joint disease.

Audience Take Away

- This will help to identify abnormalities in the TMJ anatomy in patients with arthritis
- Knowing the characteristics of arthritis in CT scan, we can guide the patient to an oral rehabilitation, avoiding further degeneration and long-term effects.
- The audience will learn to identify TMJ degeneration, helping them to diagnose and guide them to future treatment.

Biography

Camargo studied dental school at Montemorelos University, Mexico and graduated as DDS in 2011. She then joined to Mexican Dental Association. She received her title as a specialist in Restorative Dentistry in 2016 and published one article in American Journal of Translational Research. Then she obtained the position of Professor at UB and later as a Professor in the specialty of Restorative Dentistry at UM.

**POSTER
DAY 01**

**6TH EDITION OF INTERNATIONAL
CONFERENCE ON**

**DENTISTRY AND
ORAL HEALTH**

11-12 AUGUST



John Watt* and Tara Lee

Musgrove Park Hospital, United Kingdom

Primary care orthodontic referrals to hospital services and their usage of orthodontic indices

Background: In England patients with complex/multidisciplinary orthodontic needs can be referred and treated in a hospital setting. Finances for such services are limited, therefore the orthodontic indices, index of orthodontic treatment (IOTN), can be used by dentists on assessment in order to grade which patients are suitable for these services. However, inaccurate referrals still occur and can increase waiting times for patients and put unnecessary administrative pressure on staff. It is therefore important hospital orthodontists liaise with their local primary care dental colleagues to ensure effective and timely patient management occurs.

Objective: To assess the quality, accuracy and suitability of dental referrals to secondary care orthodontic departments at Musgrove Park & Yeovil Hospital.

Methods: Data was collected from 119 patients who were referred within a 3-month period to these hospitals orthodontic departments. Data was collected using patient medical records and analysed.

Results: In total, 36/119 (30.25%) of referrals during this timeframe were rejected. The majority (80.65%) came from general dental surgeons, but rejections did come from specialist orthodontists in a primary setting (13.89%) as well as in orthodontists in hospital and dental access centres (2.78% each). The reasons for rejection included 'suitability for specialist practice' (58.33%), 'too early for referral' (16.67%), 'not enough information' (16.67%), 'wrong specialism' (2.78%) and 'geographic reasons' (2.78%). From the rejected referrals, 28.13% of the IOTN scores recorded were found to be incorrect. With the majority (88.88%) being from general dentists.

Conclusion: IOTN is not always used correctly, and many dentists may struggle to understand the difference between hospital and primary care orthodontic treatment. Further training and support should be given to local primary care dentists to correctly use IOTN and where to appropriately refer orthodontic cases.

Biography

John qualified as a dental surgeon in England from the University of Central Lancashire (UCLAN), he has also been awarded a Biological & Medicinal Chemistry degree with honors from the University of Exeter. After graduating he has continued with his education and training which has recently resulted to being awarded membership to the Royal College of Surgeons in England. John currently resides in Somerset, where he works as a senior house officer in oral & maxillofacial surgery at a general district hospital. He has a keen interest in interdisciplinary links between specialties of dentistry; particularly oral surgery and orthodontics, including the management of these patients and how quality of patient care can be improved.

KEYNOTE FORUM

DAY 02

6TH EDITION OF INTERNATIONAL
CONFERENCE ON

DENTISTRY AND ORAL HEALTH

11-12 AUGUST



Sergio charifker

SOEPE, Brazil

3D Bridge augmentation concept

Although implant treatment has evolved since first Branemark rehabilitation the need for a bone housing is still primary task. Many times oral surgeon face huge bone defects that limit implant supported prosthesis and have to decide what kind of regenerative treatment to proceed, and can be lost among the variety of procedures that are find in literature. One of the biggest problems is how to summarize the surgical protocol with many different options, from autologous block graft to xenogenic and synthetic particles. Our purpose is to create a method to link the regenerative protocol to the amount of bone defect, in order to give predictability to treatment. The classification of the timepoint, immediate or late, lead to a maneuver that tend to maintain the ridge architecture, and have the benefit of most esthetic result, and can be classified as ridge preservation - 4 walls defect - or ridge regeneration - 3 walls defect - associated or not with the immediacy of implantation when the approach is simultaneous to tooth loss. On the other hand, after the healing period, in the late approach, the objective of treatment is to restore the ridge architecture, and aesthetic results can be achieved but with less predictability. The predictability of treatment can be guarantee when rigid protocols has been followed, and the knowledge of bone defect classification assure the right treatment to be done. This lecture will show the different aspect of horizontal bone defect, and the influence of cancelous bone between the buccal and lingual cortical and how it permits a more flexible treatment protocol, and how the lack of cancelous bone limits it. At least, how to give predictability when treating 3d defect (vertical bone defect), and the new perspective in biomaterials that can be used.

Audience Take Away

- How to diagnose and classify ridge defects.
- From the bone defect, the audience will learn how to plan the most indicated treatment.
- The protocol shown in the lecture presents the expertise of the authors, and can be replicable.
- The treatment protocol had been made to make simple the choice of regenerative technique to be use.

Biography

Sergio Charifker had graduated in dentistry in 2003 (Universidade Federal de Pernambuco) and post graduated in Facial Surgical Anatomy (São Leopoldo Mandic - Campinas/SP) and Oral and Maxillofacial Surgery (Universidade Federal de Pernambuco). Has the master degree in Implantology (São Leopoldo Mandic - Campinas/SP) and still running PHD in implantology at Universidade de Guarulhos/SP. Coordinate post degree courses in Implantology and are consultant of Criteria Biomaterials.

SPEAKERS

DAY 02

6TH EDITION OF INTERNATIONAL
CONFERENCE ON

DENTISTRY AND ORAL HEALTH

11-12 AUGUST



Amitha H.A* and Dona Elizabeth Babu

V S dental college and Hospital, India

Extraction and purification of immunoglobulin y (IGY) and assessment of antimicrobial efficacy of IGY against Dental pathogens. An invitro study

Oral health and general wellbeing are inextricably bound and the eruption of teeth during first year leads to colonization of Streptococcus Mutans (S. Mutans). Dental caries, an ever-growing public health problem is not much amenable to existing preventive measures. The aim of this study is to compare the antimicrobial efficacy of the chicken egg yolk antibodies, Immunoglobulin (IgY), against Streptococcus Mutans (S. Mutans), Enterococcus Faecalis (E. Faecalis) and Lactobacillus on 1-, 15- and 30-day intervals. IgY is extracted and purified by Polyethylene Glycol (PEG) precipitation method and the extracts are added to the culture plates containing S. Mutans, E. Faecalis and Lactobacillus by the well diffusion method and measurement of the diameter of the clear zone as an indication of bacterial growth inhibitory response by an antibacterial compound is done. Diameter of inhibition zones, which was clear area (there was no bacterial growth) were measured using a caliper. A repeated measures ANOVA with a Greenhouse-Geisser correction to determine the mean of S. Mutans, E. Faecalis and Lactobacillus between the time points show that there is statistically significant result in the effect of IgY against Lactobacillus and E. Faecalis. There is antimicrobial effect of IgY against S. Mutans but the result is not statistically significant in between the time intervals. Results of this study demonstrate that IgY has antimicrobial effects against dental pathogens; S. Mutans, E. faecalis and Lactobacillus.

Audience Take Away

- Immunoglobulin (IgY) is an antibody found in chicken eggs, reported to inhibit the adhesion of streptococcus Mutans to tooth surfaces.
- IgY fraction was purified by processing the chicken yolk to produce an IgY

anti-S mutans water-soluble fraction, which in turn inhibits the activity of the Enzyme role in the accumulation and carcinogenicity of S. mutans on tooth surface.

- In this literature there are enough studies to prove the activity of IgY against S. Mutans. No studies are available to know the effect of IgY on other dental caries causing bacteria.
- Lactobacilli- the second most cariogenic bacteria which helps in caries progression.
- Enterococcus faecalis is a gram positive facultative anaerobic coccus. It is small enough to invade and live within dentinal tubules and can endure prolonged periods of starvation associated with different peri radicular diseases and asymptomatic persistent endodontic infection.
- In present study, the results conclude that there are statistically significant results against lactobacillus and E. Faecalis in between the time intervals.
- This in vitro study enables us to prove the effect of IgY on other dental caries causing bacteria. So further in vivo studies can be conducted to know the effect of IgY on E. Faecalis and Lactobacillus.
- By conducting future in vivo studies, dental formulations can be formulated to use as intracanal medicament, caries preventive agents, Pit and Fissure sealants and mouth rinses.

Biography

Amitha H.A (presently working as Associate Professor in the Department of Pediatric dentistry) completed her under graduation (B.D.S) from A.B Shetty Institute of Dental Science and MDS (Pediatric dentistry) from V.S Dental and Hospital (under RGUHS Bangalore). As an undergraduate, she was a top student in the subject of Community dentistry and Oral medicine and also securing second rank in conservative dentistry under RGUHS (2002-2007). As a post graduate, she secured 5th rank in pediatric Dentistry. As an Assistant and Associate Professor in Department of pediatric and preventive dentistry in V.S dental College and Hospital, she presented numerous poster and papers in various National and International Conferences with several national as well as international publications in her name. She has also undergone training in Nitrous oxide Inhalation management of Special Children



Vinay Mohan

K. D. Dental College and Hospital, India

COVID 19 complication in head and neck region

With the surge of cases during the second wave of COVID-19, India faced a number of Mucormycosis cases, a rare but potentially fatal fungal infection, caused by the mucormycetes. The increased prevalence of Mucormycosis among COVID-19 patients may be associated with increased use of steroids, or the possible immunocompromised state caused by SARS-CoV2 or co-existing conditions such as Diabetes Mellitus. Presenting a case of post COVID-19 Sino-alveolar Mucormycosis infection where the patient had been tested positive for COVID-19 with superimposed Diabetes Mellitus, thus treated according to the persisting protocols. Following recovery, he developed multiple abscess and mild pain in left maxillary region. A diagnosis of Mucormycosis was established after Contrast Enhanced Computed Tomography (CECT) and cytology. Management was done with surgical debridement and antifungal therapy. Patient recovered and was discharged from hospital after 10 days.

Audience Take Away

- In a COVID positive patient, when already there is a viral load in the body, use of steroids should be absolutely contraindicated so as to prevent occurrence of complications as Rhinomaxillary Mucormycosis as in this case.

Biography

Vinay Mohan, BDS from C.O.D.S affiliated to M.A.H.E., Manipal, and post graduated as MDS Oral Medicine & Radiology in 2007 from K L E S dental college Belgaum. He is working as Professor at the K D Dental College and Hospital Mathura since 20016. He has published more than 40 articles in various indexed journals.



Humera Ayesha

Al Badar Rural Dental College and Hospital, India

Pregnancy outcome of antithyroid drugs (Neomercazole) on developing jaw. An array of clinical & radiographic findings

Hyperthyroidism is an endocrinal disorder caused by abnormal excessive production of thyroid hormone, characterised by intolerance to heat, emotional instability, tremors, increased appetite, and weight loss. Hypertension, sinus tachycardia, increased cardiac output & heart murmurs. Various antithyroid drugs are used for the treatment. Neomercazole is one among them. We present a case of a 17-year-old boy with a chief complain of exfoliation of upper front teeth 1 day back. History of present illness revealed that he lost his upper front teeth while he was having chicken sticks. Both the teeth were mobile before exfoliation. There was no history of trauma. His medical history was insignificant. Family history revealed that the patient's mother was hyperthyroid since past 30 years and on antithyroid medication. On further eliciting the pregnancy history of patient's mother, she revealed that she was having Neomercazole during her first trimester unknowingly, and later discontinued the medicines on her gynaecologist instructions. She also reported of multiple abortions during that period. On general physical examination the patient is tall statured 5 feet 11 inches, thin physique, with all vital signs in normal range. There was no abnormality detected on extraoral examination. On intraoral examination there was 11, 21 missing. There was generalised periodontal pockets and mobility of teeth. On radiographic examination there was multiple retained deciduous teeth and all molars with short roots and open apices and tapered lingually, atypical presentation of tooth morphology, altered crown- root ratio. There was a radiolucent lesion in between 12 and 14. 13 was missing. Later, CBCT was done and there was big lesion involving maxilla. The lesion was operated and sent for histopathological examination and the results are awaiting.

Conclusion: There are little cases reported in the literature, some goes undetected, thus a detail knowledge and awareness about the hormonal impact on maxillofacial region is required. Combined long-term research with collaboration of endocrinologist and dentist can improve the quality of life of an individual.

Audience Take Away

- Interpret an unusual lesion, whether they are developmental, hormonal or manifestations of systemic disease.
- Diagnose the case where there are no obvious clinical findings.
- Investigate a case and advise specialised imaging modalities if required.
- Manage a case with interdepartmental and interdisciplinary approaches.
- Dental considerations on endocrinal disorders.

Biography

Humera Ayesha has completed her graduation and post-graduation from Al Badar Rural Dental College & Hospital Gulbarga, which is affiliated to Rajiv Gandhi University of Health Sciences, Bengaluru. She obtained the position of Senior Lecturer in the same institute. She published more than 50 research articles in National and International Journals. She is the associate editorial board member of Scientific Journal and reviewer of many articles.



Gayatri Ganesh

Stunning Dentistry, India

Platelet derived concentrates and accelerated orthodontics – A promising future??

The time duration associated with fixed orthodontic treatment continues to act as one of the primary deterrents in patients opting for the same. The sequelae of the extensive treatment duration are often associated with side effects such as white spot lesions, periodontal diseases and root resorption. Thus, devising methods to accelerate the tooth movement thereby hastening the regenerative process, persist to be one of prime goals of clinical research. Many surgical and non-surgical techniques have been developed by the researchers over the years to enhance the rate of tooth movement. The surgical approaches such as micro-osteoperforation or precision, though clinically effective, are not accepted by the patients due to their invasive nature. The effects of the non-surgical methods such as localised injection of biological agents such as parathyroid hormone, prostaglandins, vitamin D3 are still debatable. Techniques such as the application of photobiomodulation using low level lasers or LED, ultrasonic therapy or mechanical vibrations are also not popular due to their cumbersome and multiple applications to attain minor changes. Subsequently, accelerating the rate of orthodontic movement continues to be a highly desired outcome by the patient as well as the orthodontist, prompting continued research in this field. Orthodontic tooth movement essentially involves bone remodeling comprising of alternate cycles of bone deposition and resorption. A significant source of autologous growth factors and cytokines are platelets, playing a crucial role in regenerative procedures. The platelets and their derived concentrates are widely used in dermatological procedures and in a few oral surgical and periodontal surgeries. Their application in orthodontics, until recently, was limited, till a few researchers suggested their role in accelerating tooth movement. Moreover, their successful use for regenerative purposes in other fields has prompted researchers to experiment and verify the results for accelerating orthodontic tooth movement. However, due to limited human studies and wide applicability of different concentrates, their role largely remains unexplored in orthodontics. Due to the promising results displayed by the limited studies, the derived concentrates can prove to be a game changer in accelerating tooth movement and trials need to be undertaken on a larger scale.

Audience Take Away

- PDC have been widely and successfully used in other fields of medicine and are well known for their benefits.
- Easy to use and access with limited drawbacks.
- Research in orthodontics has mainly been concerned with ways and means to find solutions to reduce the treatment duration. Successful use of these concentrates can prove to be this path.

Biography

Gayatri Ganesh is a cognizant and experienced dental professional, who is an alumnus of the most distinguished dental institution of the country, Maulana Azad institute of dental sciences, New Delhi India. She completed her Bachelors in Dentistry in 2014 and Masters in Orthodontics and Dentofacial orthopaedics in 2018. She was immediately appointed as a senior resident after completion of her residency. Currently practicing as a Senior consultant, she is a certified Invisalign provider and has treated eminent personalities from government ministries and the entertainment industry. Her passion for orthodontics reflects well with multiple publications in leading scientific journals and being awarded for her clinical papers.



Kanika Gupta Verma

Teerthankar Mahaveer University, India

Biological restorations in pediatric Dentistry

Biological restorations using natural tooth are upcoming aesthetic solutions for restoring tooth to its original form and function. This technique comprised of bonding the sterile dental fragments to teeth having extensive coronal destruction. Cavity preparation should be non-retentive and the biological fragment is retained using adhesive materials. The tooth fragments are obtained either from the patient or from a tooth bank. They may be used as a safe and reliable alternative to restore the dental anatomy and function with excellent biomechanical properties. Restoring an extensive carious lesion should be done properly so as to reestablish their anatomy and hence obtaining masticatory, phonetic, esthetic and space-maintainer functions in the dental arches. The premature loss of a primary tooth can lead to the loss of vertical dimension of occlusion, habits like tongue thrusting and mouth breathing, that can cause future malocclusion. Managing space, establishing esthetics, restoring teeth to ensure adequate form and function has always been a challenge for pediatric dentist. An ever-increasing demand for esthetics has led to innovation and development of newer treatment modalities for these problems. In an attempt to widen the treatment options as biologically and conservatively as possible, tooth structure is used as a restorative material to rehabilitate severely destroyed tooth crowns. Tooth as biological restoration restore aesthetics, form and function adequately and efficiently. The biological way of restoring decayed and damaged tooth structure is a new advancement and a boon to Pediatric Dentistry.

Audience Take Away

- Biological restorations in Pediatric dentistry are coming up as a boon in the field. With the increasing awareness among parents, children and adolescents biological restorations is the future of dental professionals. Biological restorations and smile designing in children is still a way to go. There are many advancements that are coming up in this field that can benefit one of the most important age groups of our life. These advancements are required to be applied in practice, so that dental professionals can provide maximum benefit to pediatric population.

Biography

Kanika Gupta Verma received her Bachelor's in Dentistry from Govt Dental College & Hospital, Amritsar, Punjab in 2005; and Masters in Paediatric & Preventive Dentistry from Guru Nanak Dev Dental College, Sunam, Punjab in 2009. She is fellow in Scientific writing and Clinical trials. She has been working as an active academician for 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.



Ramesh Nagarajappa

Siksha 'O' Anusandhan, India

Insights into the impact of binge-watching

Binge-watching (likewise called binge-viewing) is the act of watching entertainment or informational content for a prolonged time span, typically a single television show. Research shows that watching consecutive episodes of our favourite show may excite our brain, and subsequently, interfere with our ability to rest. Squeezing in just one more episode can make us keep awake until late at night, leaving us feeling tired and drained the next day. Over time, this might hurt our wellbeing in numerous ways. Among the concerns researchers have raised are decreased physical inactivity, sleep problems and fatigue, blood clots, heart problems, poor diet, social isolation, behavioral addiction, and cognitive decline. Like gambling and other behavioral addictions, binge-watching activates the part of our brain responsible for “reward” functions, producing dopamine and making us feel good. Over time, though, our brains produce less dopamine from the similar degree of movement as we build up a level of resilience. When it becomes rampant, viewers may start to neglect their work and their relationships with others. Attributable to these outcomes, different methodologies can be planned to overcome the suffering from binge-watching.

Biography

Ramesh Nagarajappa, graduated from the prestigious Bapuji Dental College and Hospital, Davangere, India in 1999. I am presently working as a Professor and Head, in the Department of Public Health Dentistry affiliated to Siksha 'O' Anusandhan (Deemed to be University) at Bhubaneswar in India. I have a post-graduation teaching experience of over 22 years and guiding both PhD and MDS students. I have also authored 133 publications in various international and national reputed journals. Been a regular reviewer too in many journals. I do have an experience of delivering scientific presentations and chairing scientific sessions in various conferences.



Rayane Pereira de Araújo*¹; Frederico Marcio Varela Ayres de Melo Junior²; Julia de Souza Beck³; Victor Leonardo Mello Varela Ayres de Melo⁴; Maria Luísa Alves Lins⁵; Rodrigo Henrique Mello Varela Ayres de Melo⁶; Deise Louise Bohn Rhoden⁷; Milena Mello Varela Ayres de Melo Pinheiro⁸; Jussara Diana Varela Ayres de Melo⁹; Nely Dulce Varela

de Melo Costa Freitas¹⁰; Esdras Marques da Cunha Filho¹¹; Anna Luiza Konig Hunka¹²; Lohana Maylane Aquino Correia de Lima¹³; Bruna Heloísa Costa Varela Ayres de Melo¹⁴; Evellyn Maria Silva De Almeida¹⁵; Edith Maria Feitosa El-Deir¹⁶; Thayná Lacerda Almeida¹⁷; Zélia De Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Lucas Alexandre De Moraes Santos²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

²Dental Surgeon, Federal University of Pernambuco – Recife, Pernambuco, Brazil.

³Undergraduate dental student, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

⁵Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

⁶General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil.

⁷Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil.

⁸Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

⁹Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil

¹⁰Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil.

¹¹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

¹²Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil.

¹³Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁴Undergraduate dental student, UNIFACEX – Natal, Rio Grande do Norte, Brazil.

¹⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁶Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁷Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru.

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru.

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraíba, Brazil.

²²College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²³Physiotherapist at University open of Therapist- Pernambuco, Brazil.

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

Resection of submandibular Angiolipoma associated with a patient with Von Recklinghausen's disease

Angiolipoma is a benign tumor clinically similar to a lipoma, but its degree of vascularization is much higher when examined microscopically. It is formed by fatty acids and vascular elements. It mainly occurs in the trunk and extremities and is uncommon in the head and neck area. Neurofibromatosis is a relatively common hereditary condition, having no preference for gender or race. The most common form is type I (NF1), also known as Von Recklinghausen Disease. It is characterized by a mutation on chromosome 17q11.2. Its manifestations are café au lait spots, ephelides and neurofibromas, Lisch nodules and bone dysplasias. The present work aims to report a clinical case of a patient with neurofibromatosis type I, who presented an angiolipoma. Patient, male, 36 years old, melanoderma, sought the Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco, complaining of an increase in volume in the right submandibular region. During the anamnesis, it was observed that the patient had Von Recklinghausen Disease. Clinically, the lesion was well delimited, soft to palpation, mobile and painless. The surgical procedure was chosen under local anesthesia. Initially, a vertical incision was performed, divulsion of the myocutaneous tissues, resection of the lesion and suture with nylon thread, in separate stitches. The surgical specimen was sent to the Pathological Anatomy Unit of the Hospital das Clínicas at the Federal University of Pernambuco, where the diagnosis of angiolipoma was confirmed. The treatment was presented favorably in relation to the case. In conclusion, it is extremely important that the Dental Surgeon is aware of the characteristic signs and symptoms of NF1 to establish a correct diagnosis, both in patients who already have the disease and in those at risk of developing it.

Audience Take Away

- Definition of Angiolipoma.
- Description of a surgical clinical case.
- The dental surgeon must know how to identify characteristic signs and symptoms of von Recklinghausen's disease to establish a correct diagnosis.

Biography

Dental School student in Federal University of Pernambuco, Brazil, currently is an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco, being a member of the project to care for patients with oral diseases and facial traumas and the project entitled prevention and treatment of cancer in face and mouth regions in Venturosa-Pernambuco-Brazil. Also, member of the project Use of the Traditional Chinese Medicine in the treatment of patients with temporomandibular disorder.



Renata Araujo Varela Ayres de Melo¹; Lohana Maylane Aquino Correia de Lima²; Frederico Marcio Varela Ayres de Melo Junior³; Julia de Souza Beck⁴; Victor Leonardo Mello Varela Ayres de Melo⁵; Maria Luísa Alves Lins⁶; Rodrigo Henrique Mello Varela Ayres de Melo⁷; Milena Mello Varela Ayres de Melo⁸; Jussara Diana Varela Ayres de Melo⁹; Nely Dulce Varela

de Melo Costa Freitas¹⁰; Esdras Marques da Cunha Filho¹¹; Bruna Heloísa Costa Varela Ayres de Melo¹²; Rayane Pereira de Araújo¹³; Evellyn Maria Silva De Almeida¹⁴; Edith Maria Feitosa El-Deir¹⁵; Thayná Lacerda Almeida¹⁶; Anna Luiza Konig Hunka¹⁷; Zélia De Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Filipe Cavalcanti de Andrade Lima Brito²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Undergraduate Medical Student, Maurício de Nassau University, Recife, Pernambuco, Brazil.

²Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

³Dental Surgeon, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁴Undergraduate dental student, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

⁶Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

⁷General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil.

⁸Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

⁹Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil.

¹⁰Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil.

¹¹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

¹²Undergraduate dental student, UNIFACEX – Natal, Rio Grande do Norte, Brazil.

¹³Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁶Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁷Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil.

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru.

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru.

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraiba,

²²Physiotherapist; Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²³Physiotherapist at University open of Therapist- Pernambuco, Brazil.

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral

Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil

Reconstruction of zygomatic-orbital fracture produced by melee weapon

Facial trauma can be considered one of the most devastating aggressions found in trauma centers due to emotional consequences and the possibility of deformity. The traumas produced by metal instruments are common in wars, personal conflicts and in various accidents, and can cause injuries from minor injuries to extensive and severe fractures. The lesions of the maxillofacial complex represent one of the most important health problems in the world, the zygomatic region is the second area of the face most affected by lesions, surpassed only by the nasal bones. A 20-year-old male patient, melanoderma, presented to the Buco-Maxilo-Facial Surgery and Traumatology Service in Recife, Pernambuco, taken by the Emergency Medical Care Service (EMCS), reporting being the victim of physical assault by a melee weapon. In the anamnesis it was observed that the patient had a conscious state, alcoholized, eupnetic, normocored and fractures in the left fronto-zygomatic regions, left zygomatic body, left parietal, left temporal, left and right jaw, nasal, vomer, ethmoid, and sphenoid, also presenting bone fragments within the orbital cavity. After the clinical examination the imaging analysis of axial tomography, the treatment plan was based on the volemic replacement performed with Ringer with lactate and the patient was referred to the surgical block, where he was operated by the buco-maxilo-facial surgery and traumatology team. During facial reconstruction, there was hemostasis of wounds, debridement of devitalized tissues, removal of foreign bodies and bone spicules, reduction of fractured bones through the wounds themselves, promoting their stabilization through steel wires and rigid internal fixation, with plates and screws, seeking to return the contour of the orbit and the zygomatic region leaving them as close as possible to normality, despite the loss of substance. The bone fragments contained within the orbital cavity caused damage to the left eyeball, with destruction and loss of vitreous humor, causing amaurosis and loss of the left eyeball. After the evaluation of the ophthalmologist, it was necessary to perform the evisceration of the same. Subsequently, the flaps were positioned and the suture by planes was performed with the coaptation of the edges of the wounds in a satisfactory manner. In the immediate postoperative period it was necessary to perform an anterior nasal tamponade due to present rhinorrhagia. In the postoperative period, after 90 days there was a satisfactory facial symmetry, but requiring the placement of an ocular prosthesis to improve the low self-esteem of the patient, due to the psychological and emotional in an attempt to return to normal social life. The success of the treatment depends on the correct handling of the lesions soon after the trauma. In this case, satisfactory bone consolidation was achieved, restoring the function and aesthetics of the patient, including rehabilitation through the ocular prosthesis, with no postoperative complications. It was found that the rapid multidisciplinary intervention, combined with a correct surgical technique, ensures the good prognosis of the patient.

Audience Take Away

- Definition.
- Clinical and histopathological characteristics.
- Forms of treatment.
- Description of a surgical clinical case.

Biography

Undergraduate Medical Student, Maurício de Nassau University – Recife, Pernambuco, Brazil. Currently, she is an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco, being a member of the projects care for patients with oral diseases and facial traumas, the project prevention and treatment of cancer in face and mouth regions in Venturosa-Pernambuco-Brazil and the project intitled Use of Traditional Chinese Medicine in the treatment of patients with temporomandibular disorders.



Thayna Lacerda Almeida^{*1}; Frederico Marcio Varela Ayres de Melo Junior²; Bruna Heloísa Costa Varela Ayres de Melo³; Júlia de Souza Beck⁴; Victor Leonardo Mello Varela Ayres de Melo⁵; Maria Luísa Alves Lins⁶; Rodrigo Henrique Mello Varela Ayres de Melo⁷; Deise Louise Bohn Rhoden⁸; Milena Mello Varela Ayres de Melo Pinheiro⁹; Jussara Diana Varela Ayres de Melo¹⁰; Nely Dulce Varela de Melo Costa Freitas¹¹; Esdras

Marques da Cunha Filho¹²; Anna Luiza Konig Hunka¹³; Lohana Maylane Aquino Correia de Lima¹⁴; Rayane Pereira de Araújo¹⁵; Evellyn Maria Silva de Almeida¹⁶; Edith Maria Feitosa El-Deir¹⁷; Zélia de Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Lucas Alexandre de Moraes Santos²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

²Undergraduate dental student, Maurício de Nassau University, Natal, Rio Grande do Norte, Brazil,

³Undergraduate dental student, Centro Universitário Facex – UNIFACE, Natal, Rio Grande do Norte, Brazil,

⁴Undergraduate dental student, Maurício de Nassau University, Natal, Rio Grande do Norte, Brazil,

⁵Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

⁶Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

⁷General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil,

⁸Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil,

⁹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil,

¹⁰Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil,

¹¹Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil,

¹²Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil,

¹³Undergraduate medical student, Faculdade Integrada Tiradentes – FITS, Recife, Pernambuco, Brazil.

¹⁴Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil, .com

¹⁵Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

¹⁶Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

¹⁷Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru,

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru,

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraiba, Brazil,

²²College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil,

²³Physiotherapist at University open of Therapist, Pernambuco, Brazil,

²⁴Head of Department of Bucofacial of Dentistry Course, Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil

Fibrous hyperplasia caused by maxillary sinus decompression device

Fibrous hyperplasia is a lesion characterized by the formation of epithelial tissue and fibrous connective tissue in response to chronic trauma or local irritation. It is often located in regions close to the alveolar ridge, cheek mucosa, tongue and lower lip, and may present atypical locations, such as the maxillary sinus. The aim of this study is to report the clinical case of a patient affected by fibrous hyperplasia in the left maxillary sinus, caused by a decompression device. Case report: The patient came to the Oral and Maxillofacial Surgery and Traumatology Outpatient Clinic of the Federal University of Pernambuco complaining of a foul-smelling secretion that came out of the nasal and oral cavities. During the anamnesis, he reported having performed decompression surgery at the affected site approximately seven years ago at another service and, after being discharged from the hospital, he did not return for reassessment. The intraoral clinical examination revealed a hyperplastic, normochromic lesion, involving a foreign body in the left maxillary sinus region. An incisional biopsy of the lesion was performed, resulting in the diagnosis of fibrous hyperplasia. Surgical treatment was recommended, using the Caldwell-Luc technique to access the maxillary sinus region. Surgery proceeded with removal of the foreign body and resection of the lesion. The patient was followed up for 7, 15, 30, 60, 90, 180 days and annually, without signs of recurrence. Conclusion & Significance: The Caldwell-Luc technique allows easy access to the maxillary sinus and its use is frequently described in the literature for the removal of foreign bodies, as well as for the treatment of pathological processes in the region. The patient is under follow-up, with no complaints or episodes of recurrence of the inflammatory process.

Audience Take Away

- Definition and characteristics of Fibrous Hyperplasia.
- Learn the main clinical findings to diagnose the Fibrous Hyperplasia.
- Forms of treatment.
- Description of a surgical clinical case.

Biography

Thayna Lacerda is undergraduate Dentistry student of Federal University of Pernambuco. She is an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco, being a member of the projects care for patients with oral diseases and facial traumas, the project prevention and treatment of cancer in face and mouth regions in Venturosa – Pernambuco - Brazil and the project intitled Use of Traditional Chinese Medicine in the treatment of patients with temporomandibular disorders.



Anna Luiza Konig Hunka¹; Lohana Maylane Aquino Correia de Lima ²; Frederico Marcio Varela Ayres de Melo Junior³; Julia de Souza Beck⁴; Victor Leonardo Mello Varela Ayres de Melo⁵; Maria Luísa Alves Lins ⁶; Rodrigo Henrique Mello Varela Ayres de Melo⁷; Milena Mello Varela Ayres de Melo ⁸; Jussara Diana Varela Ayres de Melo⁹; Nely Dulce Varela de Melo Costa

Freitas¹⁰; Esdras Marques da Cunha Filho¹¹; Bruna Heloísa Costa Varela Ayres de Melo ¹²; Rayane Pereira de Araújo¹³; Evellyn Maria Silva De Almeida¹⁴; Edith Maria Feitosa El-Deir¹⁵; Thayná Lacerda Almeida¹⁶; Renata Araújo Varela Ayres de Melo¹⁷; Zélia De Albuquerque Seixas¹⁸; Neme Portal Bustamante¹⁹; Juan Carlos Barrenechea Montesinos²⁰; Jorge Pontual Waked²¹; Filipe Cavalcanti de Andrade Lima Brito²²; José Leonardo de Paiva e Souza²³; Ricardo Eugenio Varela Ayres de Melo²⁴

¹Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil.

²Dental Surgeon; Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

³Dental Surgeon, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁴Undergraduate dental student, Maurício de Nassau University – Natal, Rio Grande do Norte, Brazil.

⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

⁶Dental Surgeon, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

⁷General Surgeon, Southern Society Divine Providence Hospital, Rio Grande do Sul, Brazil.

⁸Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

⁹Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil.

¹⁰Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil.

¹¹Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil.

¹²Undergraduate dental student, UNIFACEX – Natal, Rio Grande do Norte, Brazil.

¹³Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁴Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁵Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁶Undergraduate dental student, Federal University of Pernambuco - Recife, Pernambuco, Brazil.

¹⁷Undergraduate Medical Student, Maurício de Nassau University, Recife, Pernambuco, Brazil.

¹⁸College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil.

¹⁹College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru.

²⁰Dental Health of the Army of Peru, Peruvian Army, Lima, Peru.

²¹College Professor of Dentistry Course; Federal University of Campina Grande, Campina Grande, Paraíba, Brazil.

²²Physiotherapist; Federal University of Pernambuco, Recife, Pernambuco, Brazil.

²³Physiotherapist at University open of Therapist- Pernambuco, Brazil.

²⁴Head of Department of Bucofacial of Dentistry Course; Coordinator of the Specialization Course in Oral Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil

Resection of metatypical type basocellular carcinoma with self-grafting reconstruction

The face is characterized as a potential area for the development of malignant pathologies, whose manifestation is directly related to the amount of sun exposure. Basal cell carcinoma constitutes most of the so-called non-melanoma skin cancer and can be classified into several forms that demonstrate different clinical patterns. They have multifactorial pathogenesis, with the influence of ultraviolet radiation. Patients are usually middle-aged or elderly and are more common in Caucasians. The incidence is approximately 30% higher in men than in women and about 80% are in the head or neck. Metatypical carcinoma is an uncommon type of basal cell carcinoma that exhibits aggressive clinical behavior. Basal cell carcinomas are almost always asymptomatic and reported by patients as a non-healing lesion. They have a slow and progressive growth and in the beginning, they can be confused with acne lesions, abrasions, nevi or allergies by the patients. It shows an invasive front displaying a mixture of basal cell carcinoma and squamous cell carcinoma with a superficial basal cell carcinoma or overlying clear nodular carcinoma. Basal cell carcinoma is not considered a fatal condition. However, if diagnosed late or treated incorrectly, it can destroy anatomical structures and become a therapeutic challenge as it has the potential to cause significant morbidity through invasion and destruction of local tissue, resulting in severe disfigurement, loss of function and, in cases rare, death. There is a need for complementary exams for better diagnosis of the lesion. Biopsy is essential to identify the type of basal cell carcinoma and to define the excision margins of the lesion according to its histological subtype. Thus, the histological diagnosis and classification of basal cell carcinomas will be essential for planning the management of the patient. Treatment can be surgical or non-surgical. This article aims to report a clinical case of a patient who had metatypical carcinoma. Female patient, 77 years old sought the Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco. The patient underwent resection of the injured tissue followed by reconstruction using an autograft with tissue removed from the pectoral region. It is observed that due to the high degree of malignancy and recurrence of the pathology, a thorough anamnesis and clinical conduct was performed, minimizing the risks involving the pathology and returning aesthetics and function to a patient. The postoperative period was uneventful and after 15 days the stitches were removed. The patient was followed up for a period of five years and showed total tissue adaptation in the previously injured region, with good healing and favorable aesthetics with no signs of recurrence.

Audience Take Away

- Definition of metatypical type basocellular carcinoma.
- Clinical and histopathological characteristics of metatypical type basocellular carcinoma.
- Forms of treatment.
- Description of a surgical clinical case.

Biography

Undergraduate Medical Student, FITS – Recife, Pernambuco, Brazil. Currently, she is an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco, being a member of the projects care for patients with oral diseases and facial traumas, the project prevention and treatment of cancer in face and mouth regions in Venturosa-Pernambuco-Brazil and the project intitled Use of Traditional Chinese Medicine in the treatment of patients with temporomandibular disorders.



Victor Leonardo Mello Varela Ayres de Melo*¹, Kleyciane Kévilin Pereira da Silva², Frederico Marcio Varela Ayres de Melo Junior³, Júlia de Souza Beck³, Bruna Heloísa Costa Varela Ayres de Melo⁴, Rodrigo Henrique Mello Varela Ayres de Melo⁵, Deise Louise Bohn Rhoden⁶, Milena Mello Varela Ayres de Melo Pinheiro⁷, Esdras Marques da Cunha Filho⁷,

Mayana Aquino Correia de Lima⁸, Rayana Cruz Correia de Lima⁹, Jussara Diana Varela Ayres de Melo¹⁰, Nely Dulce Varela de Melo Costa Freitas¹¹, Neme Portal Bustamante¹², Juan Carlos Barrenechea Montesinos¹³, Zélia de Albuquerque Seixas¹⁴, Lohana Maylane Aquino Correia de Lima¹⁵, Lucas Alexandre de Moraes Santos¹², Jorge Pontual Waked¹⁶, Ricardo Eugenio Varela Ayres de Melo¹⁷

¹Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil

²Undergraduate dental student, Facol University Center, Vitória de Santo Antão, Pernambuco, Brazil

³Undergraduate dental student, Maurício de Nassau University – Rio Grande do Norte, Brazil

⁴Undergraduate dental student, UNIFACEX, Natal – Rio Grande do Norte, Brazil

⁵General Surgeon, Ministry of Health Brazil, Rio Grande do Sul, Brazil

⁶Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil

⁷Undergraduate Medical Student, Olinda Medical Faculty, Olinda, Pernambuco, Brazil

⁸Undergraduate Medical Student, Catholic University of Pernambuco, Recife, Pernambuco, Brazil

⁹Doctor, University of Pernambuco, Recife, Pernambuco, Brasil.

¹⁰Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil

¹¹Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil

¹²College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru

¹³Dental Health of the Army of Peru, Peruvian Army, Lima, Peru

¹⁴College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil

¹⁵Dental Surgeon, Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil

¹⁶College Professor of Dentistry Course, Federal University of Campina Grande, Campina Grande, Paraíba, Brazil

¹⁷Head of Department of Bucofacial of Dentistry Course, Coordinator of the Specialization Course in Oral

Maxillofacial Surgery and Traumatology, Federal University of Pernambuco, Recife, Pernambuco, Brazil

Reconstruction of zygomatic-orbital fracture in pediatric patients victim of physical aggression by a large-caliber firearm projectile

Facial trauma can be considered one of the most devastating aggressions found in trauma centers due to the emotional consequences and the possibility of deformity. This eventuality acquires a much greater danger when produced in children, because regardless of the possible facial scars, they can also affect the centers of growth and development of the facial skeleton, with future repercussions in functional defects that translate as adults with hypoplasias, atrophies and facial disharmonies. For this reason, one must act with great professional security in the face of such emergencies, which require special care regarding diagnosis, classification and treatment, mainly because the face is one of the noblest regions of the body. This study aims to report a case of a pediatric patient victim of a domestic accident by firearm projectiles in which hit the right zygomatic-orbital causing permanent loss of vision. Female patient, 7 years old, accompanied by her mother, went to the emergency hospital in Recife-Pernambuco-Brazil reporting a domestic accident, where the hunting gun accidentally went off between two children. On extraoral clinical examination, the patient presented a perforated-blunt wound in the infected right zygomatic region and characteristic signs of bilateral amaurosis, with ecchymosis and bilateral periorbital edema. On imaging examination, he showed several fragments of firearm projectiles in the posterior region of the left orbital cavity, and with a right zygomatic-orbital fracture affecting the lateral wall and orbit floor, characterized destruction of the midface. The patient underwent, under general anesthesia, procedures for excision of foreign bodies, removal of devitalized tissues and local cleaning, minimizing risks of infection and tissue necrosis. The postoperative period continued in the normal patterns and the patient was rehabilitated with bilateral ocular prosthesis, returning aesthetic and facial symmetry. Understanding the cause, severity and temporal distribution are important factors in the effectiveness of treatment since, facial trauma is a public health concern because of its impact on quality of life.

Audience Take Away

- Definition and characteristics of facial trauma in pediatric patients.
- Trauma statistics in a pediatric patient.
- Description of a case report.
- The importance of the management of pediatric patients and the complete treatment of the initial care until the rehabilitation of the traumatized patient.

Biography

Academic in Dentistry in Federal University of Pernambuco, Brazil; Currently is an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service in the Clinical Hospital of Federal University of Pernambuco, being a member of the project to care for patients with oral diseases and facial traumas and the project entitled prevention and treatment of cancer in face and mouth regions in Venturosa-Pernambuco-Brazil. Won awarded for presentation of scientific works at national and international events and in 2018, was invited by Universidad Nacional Federico Villareal to give a conference at the XIII Congreso Internacional de Odontología and for I Jornada Internacional Multidisciplinaria de Estomatología Peruano Brasileira by Peruvian army.



Rafael Ribeiro

FACEB, Brazil

Biomimetic restorative Dentistry front the challenges of conventional Dentistry

Biomimetic is an area of science that aims to study biological structures and their functions, seeking to learn from Nature. In Dentistry, the biomimetic approach is how can we use the restorative material to integrate in the oral system like the natural teeth, with proprieties and mechanical response most similar than enamel and dentin. The best way to stop the tooth death cycle is using this restorative material associate a non-invasive technique, respecting not only the tissues that form the tooth but all structure thar surround the natural teeth. The challenge of the Biomimetic Dentistry is to prove to Doctor of Dental Surgery that the life of natural teeth is most important than the life of restorative material, cause when have the collapse of the tissues that form the natural tooth no one material can simulate the perfect force distribution system to alveolar bone, so we must learn how to treat and prevent the loss of teeth.

Audience Take Away

- Biomimetic approach to save tooth
- Deep Margin Elevation
- How to treat and prevent crack tooth
- The integration of the Restorative Material

Biography

Rafael Ribeiro graduated in Dentistry ate Pontíficia Universidade Católica de Minas Gerais in 2013 and receive in 2015 the title of Master in Implantology. Actually, is student of the abrasive proprieties of materials, responsible teacher of Restorative Dentistry in UNA (Bom Despacho, Minas Gerais, Brazil), private dental officer and owner of a dental prosthesis laboratory.



Shruthi Hegde

AB Shetty Memorial Institute of Dental Sciences, India

Applications of artificial intelligence in oral cancer

Squamous cell carcinoma of the oral cavity is the sixth most common malignancy in the world. The early diagnosis of cancer leads to better patient management. Oral cancer diagnosed in advanced stages results in morbidity and mortality. Cancers detected late are associated with increased side effects, cost of treatment and low survival rate. The use of technology may be beneficial for early detection. The field of AI has grown spectacularly over the past decade. The introduction of artificial intelligence (AI) in oral cancer screening has enormous benefits. AI can precisely analyze a vast dataset from various imaging modalities and assist in the field of oncology. In the present review, the literature search was carried out in “PubMed” and “Scopus” databases for articles published between 2012 to 2022 with search terminology “oral cancer” and “artificial intelligence”. A manual search was done to collect additional information from reference lists of selected articles. The present paper will discuss the applications and advantages of AI in oral cancer screening, early diagnosis, disease prediction, treatment planning, and prognosis. The paper also focuses on AI’s limitations and future scope in oral cancer research.

Audience Take Away

- Applications and advantages of artificial intelligence in oral oncology
- Data sets used in artificial intelligence and oral cancer research
- Limitations of artificial intelligence
- Future scope of artificial intelligence and oral cancer research

Biography

Shruthi Hegde is presently working as Reader in the Department of Oral Medicine & Radiology, AB Shetty Memorial Institute of Dental Sciences, Nitte (Deemed to be University), Mangalore, Karnataka, India. She has been working as an active academician since 12 years. She completed Bachelor of Dental Surgery from SDM Institute of Dental Sciences, Dharwad and Master of Dental Surgery (Oral Medicine and Radiology) from KLE Society’s Institute of Dental Sciences, Bangalore. She has presented multiple scientific papers and posters at National and International conferences, received four best paper awards, and delivered guest lectures at various continuing dental education programmes. She is the course faculty for the certificate course on “Cone Beam Computed Tomography” conducted by the Department of Oral Medicine and Radiology, ABSMIDS. Her special interest is in the field of research and publications. To her credit, she has over 85 scientific research papers in International and National Indexed Journals.



Maryam Shahrokhi Sardo

Shiraz university of medical science, Iran

Evaluation of the FSH, LH and prolactin serum level in patients with oral lichen planus in comparison to healthy population

Aim and Background: In this study we aimed to evaluate any possible relation of FSH, LH and prolactin level and oral lichen planus (OLP).

Materials and methods: In this cross-sectional study, the serum level of LH, FSH, Prolactin of 40 women with lichen planus who have been referred to Shiraz Dental Faculty, Oral and Maxillofacial Disease Department during 2018-2019 have been evaluated in comparison to 40 healthy controls. Data were analyzed by SPSS version 18. Two Way ANOVA and Mann Whitney test was used for data analysis.

Results: The mean serum level of FSH and LH were significantly higher in OLP patients while this difference was not reported for prolactin. Only FSH mean serum level was significantly higher in non-menopausal OLP patients. The distribution of prolactin and FSH hormones' serum level was in normal range.

Conclusions: The high serum level of FSH and LH can affect OLP pathogenesis by estrogen and progesterone modulation.

Biography

Maryam is a dentist, graduated from Shiraz University of medical science in 2021, she is also a research assistant for the oral disease department and in addition she studies MDPH (master of dental public health) at Tehran University of medical science, she has published 5 original research papers for journals. Her current researches focus are Oral cancers, oral disease, preventive dentistry and public health.



Yousef Nasrawi

Jordan Univeristy of Science and Technology, Jordan

Curve of speed: Speed of leveling using different orthodontic arch wire size and material- a randomized clinical trial

Aims: To evaluate the efficiency of 3 different rectangular archwires in the correction of curve of Spee (COS), to record the time needed to level excessive COS in the mandibular arch using the 3 archwire sizes, to investigate the changes in intercanine and intermolar widths and arch length during leveling, to measure the arterio-posterior and vertical movement for the lower incisors and lower molars, and to detect the root resorption in the lower anterior teeth associated with leveling excessive COS using the 3 different archwires.

Subjects and Methods: Fifty-one subjects with excessive COS were included in this study. The subjects were randomly divided into three groups; Group one (17 patients): leveling of COS using 0.017X0.025-inch stainless steel archwire. Group two (17 patients): leveling of COS using 0.019X0.025-inch stainless steel archwire. Group three (17 patients): leveling of COS using 0.021X0.025-inch Titanium molybdenum archwire. In the three groups, a 5mm depth reverse COS was inserted. Records consisted of lateral cephalograms (pre-treatment, at T0 and post-treatment), peri-apical radiographs (at T0 and T5), study casts (pre-treatment and at each time point during the study). Patients were followed up on monthly visits without removing leveling archwires where alginate impressions were taken for the lower arch. Pain scores during the first week of leveling were recorded using a visual analogue scale (VAS). The amount of COS correction, changes in intercanine, intermolar and arch length, pain scores, and lower incisors root resorptions were measured.

Results: The overall COS leveling was on average reduced by 3.93±0.77 mm, 4.87±0.73 mm and 4.04±0.88 mm in groups 1, 2, and 3, respectively (P<0.001). Duration of excessive COS leveling was on average 6.07±0.47 months, 5.73±0.45 months and 6.25±0.22 months in groups 1, 2, and 3 respectively. For A-P arch length, group 2 showed an increase of 2.80 mm compared to 2.46 mm in group 3 and 2.29 mm in group 1. For ICW, group 2 showed an increase of 2.73mm compared to 2.69mm in group 3 and 2.29mm in group 1. For IMW the effect of leveling was detected the most in group 3 followed by group 2 and group 1, and after leveling, IMW increase was the same in all studied groups (P>0.05). Root resorption was detected in the lower right central incisor and canine mostly in group 3 subjects with the differences between groups were at (P<0.05). For the perception of pain, less pain was reported in group 1, and the difference in pain scores was significant (P<0.05) within 48 hours between groups 1 and 3. For MPPA angle have the most significant effect in group 3 subjects (P≤0.001). Lower incisors were most proclined in group 2 subjects, with a difference in group subjects (P<0.01). Lower incisors were intruded in all groups with no significant difference (P>0.05). Extrusion for lower first molar happened in all group's subjects with a significant difference between groups 2 and 3 (P<0.01). The forward movement happened in lower incisors crown and root to all group's subjects at (P>0.05). Molar crowns moved mesially during leveling in group 1 (0.30±0.93), whereas molar crown distal tipping was detected in groups 2 and 3 -0.33±0.57mm, -0.24±0.99 respectively, also molar root moved mesially during leveling average 0.04±0.70mm, 0.06±0.97mm, 0.02±0.94mm for groups 1, 2 and 3.

Conclusion: 0.019X0.025 SS archwire was the most efficient archwire in leveling COS with less time than the other 2 archwires. Arch length, intercanine, and intermolar width were increased in all groups. Root resorption of lower right central incisor and canine when 0.021X0.025 TMA archwire was used for leveling. Pain scores were higher within 48 hours of COS leveling using 0.019X0.025 SS archwire and the least using 0.017X0.025 SS archwire. Leveling COS was done in all groups by incisor intrusion, molar extrusion, and incisor proclination on different levels.

Biography

Yousef Nasrawi graduated from Jordan University of Science and Technology in 2015 and was among the top 10% of the batch. In the following two years, in 2016 Yousef Nasrawi received a membership in the Royal College of Surgeons – Ireland, and in 2017 Yousef Nasrawi received another membership in the Royal College of Surgeons and Physicians – Glasgow. In 2020 he have finished his Master's degree in Orthodontics from Jordan University of Science and Technology, and in the same year, he had obtained the American Dental Board. He is working currently in both clinical practices and in Jordan University of science and technology as a lecturer. His main interests are in orthodontics generally and in contributing to the advanced technological methods in biomechanics specifically.



Sujatha P

Bharati Vidyapeeth Dental College and Hospital, India.

Soft tissue lasers- A magical wand

As the dentistry is having the shift from extension for prevention to the minimal invasive procedures. It's the duty of Pedodontics to create a pleasant experience for the child by using minimal invasive technologies. The use of modern methods like lasers will be an effective strategy to get a better cooperation from children. The clinical applications of lasers will be in diagnosis of oral conditions, treatment of hard and soft tissue diseases and prevention of rapidly progressing oral condition. Laser also provides opportunity to treatment children with any periodontal condition. Hence, the purpose of this presentation is to enlighten about the applications of soft tissue lasers.

Audience Take Away

- Applications soft tissue lasers as a non-invasive treatment procedure in Pediatric Dentistry.
- In Pediatric dentistry, treatment of children is quiet challenging hence lasers can be beneficial.
- Technique, advantages and disadvantages of soft tissue lasers.

Biography

Sujatha P did her Bachelor in Dental Surgery from KLE's Institute of Dental Sciences, KLE University, Belgaum, Karnataka, India and in 2013 perceived her post-graduation in Pediatric and preventive Dentistry from M S Ramaiah Dental College and Hospital, Bangalore, Karnataka, India. She has various publications to her credit. She has clinical and academic expertise of more than 6years. Currently working as Associate Professor in Department of Pediatric and Preventive Dentistry, Bharati Vidyapeeth Dental College and Hospital (Bharati Vidyapeeth DU University) Sangli, Maharashtra, India. She has been awarded 'Young Dentist in Pedodontics' award by Venus International Healthcare awards 2020.



Pavithra Prabakaran

Dayananda Sagar College of Dental Sciences, India

Comparative evaluation of low-level laser therapy in post endodontic pain management - A quasi experimental trial

Introduction: Low level lasers have an average output power range between 5 and 500 mW. Low level lasers have shown nonthermal, and bio-stimulatory effects. The most common complication of single visit endodontics is a flare-up that results in pain and swelling.

Aim: The aim of this clinical study was to evaluate the effect of Low Level Laser Therapy in pain management after single visit endodontic treatment pain.

Materials and methods: Thirty subjects with symptomatic apical periodontitis in their lower premolars were divided randomly into 3 groups. Group A was administered Low level Laser for 5 minutes prior to the procedure at the apex of the tooth through buccal mucosa and into the canal after pulp space preparation. Group B was given 600 milligrams of ibuprofen half an hour prior to the start of the treatment and given Low level Laser just prior to the treatment and into the canal after the completion of pulp space preparation. Group C was kept as a control group which was neither given analgesics nor laser preoperatively. Intensity of pain after treatment was noted down on a visual analog scale at four-hour, eight-hour, twelve hour and twenty-four-hour interval.

Results: Results were obtained after statistical analysis.

Conclusion: LLLT group showed less pain levels than the control group after single visit endodontics.

Biography

Pavithra Prabakaran has completed her BDS (Bachelor of Dental Surgery) from Dayanand Sagar College of dental sciences, Bangalore, India in 2017. She did her MDS (Masters in Dental Surgery) in department of Conservative Dentistry and Endodontics from Government Dental College and Research Institute, Bangalore (2018-2021). She is currently working as assistant professor in department of Conservative dentistry and endodontics, NSVK Shri Venkateshwara Dental College and Hospital, Bangalore, India. She has authored several publications and has also presented papers and posters in conferences and PG conventions.



Preetinder Singh

Academy of Oral Surgery, United States

Blood & its products as regenerative agent

Bone regeneration in dentistry involves the use of cells, biological or artificial biometric scaffolds, and biofactors 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

Biography

Preetinder Singh (MDS) is working as a Senior Professor in Department of Periodontology & Oral Implantology in SDD Hospital & Dental College, India and as a Senior Consultant in various dental offices around the country. Dr. Singh is an AMBASSADOR, AMERICAN ACADEMY OF ORAL SURGERY. He is the Editor in Chief of Journal of Periodontal Medicine & Clinical Practice and Associate Editor of various other famous journals. He was awarded the Best Graduate Award and Gold Medal by Kurukshetra University, Haryana, India during his BDS, based on his outstanding academic record. He has a keen interest in academics, research and clinical practice. He has around 55 research publications in various national and international journals of repute. Dr. Singh is an invited senior reviewer for 5 leading international journals indexed in PUBMED. He also has three textbooks published internationally, attached to his career till date. Dr. Singh has a great interest in periodontal & implant research field and is an invited KEYNOTE speaker for corporate lectures on his expertise in dentistry at a national & international level. He also holds a place of doing the first study in INDIA on use of recombinant PDGF in treatment of gingival recession defects. He is presently working on microsurgery, advanced Implantology, PRF, LANAP etc. Under his guidance and work, his department was awarded as the centre of excellence in dental implants in his state.

Participants List

Amitha H.A V S dental college and Hospital, India	40
Anna Luiza Konig Hunka Faculdade Tiradentes - FITS , Brazil	52
Bennete Aloysius Fernandes SEGi university, Malaysia	07
Bruna Heloisa Costa Varela Ayres de Melo UNIFACEX, Brazil	22
Chifor Ioana University of Medicine and Pharmacy, Romania	13
David Geoffrey Gillam Barts & the London School of Medicine and Dentistry, UK	09
Edith Maria Feitosa El-Deir Federal University of Pernambuco, Brazil	24
Evellyn Maria Silva de Almeida Federal University of Pernambuco, Brazil	26
Frederico Marcio Varela Ayres de Melo Junior Mauricio de Nassau University, Brazil	28
Gayatri Ganesh Stunning Dentistry, India	43
Hilal Erdogan Nevsehir Haci Bektas Veli University, Turkey	19
Humera Ayesha Al Badar Rural Dental College and Hospital, India	42
Joanna Kociubinska Glasgow Dental Hospital, United Kingdom	11
John Watt Musgrove Park Hospital, United Kingdom	12, 36
Julia de Souza Beck Mauricio de Nassau University, Brazil	30

Kanika Gupta Verma Teerthankar Mahaveer University, India	44
Laurindo Moacir Sassi Hospital Universitario Evangelico Mackenzie, Brazil	08
Lohana Maylane Aquino Correia de Lima Federal University of Pernambuco, Brazil	20
Maria Elena Camargo Rique Universidad de Montemorelos, Mexico	34
Maria Luisa Alves Lins Federal University of Pernambuco, Brazil	32
Maryam Shahrokhi Shiraz university of medical science, Iran Islamic Republic of	58
Mihajlo Petrovski Goce Delcev University, Macedonia	16
Mohamed El-Amin NHS, United Kingdom	15
Olivera Terzieva-Petrovska Goce Delcev University, Macedonia	18
Pavithra Prabakaran Dayananda Sagar College of Dental Sciences, India	61
Preetinder Singh Academy of Oral Surgery, United States	62
Rafaelribeiro FACEB, Brazil	56
Ramesh Nagarajappa Siksha 'O' Anusandhan, India	45
Rayane Pereira de Araujo Federal University of Pernambuco, Brazil	46
Renata Araujo Varela Ayres de Melo Mauricio de Nassau University, Brazil	48
Sergio charifker SOEPE, Brazil	38

Shruthi AB Shetty Memorial Institute of Dental Sciences, India	57
Sujatha P Bharati Vidyapeeth University, India	60
Thayna Lacerda Almeida Federal University of Pernambuco, Brazil	50
Victor Leonardo Mello Varela Ayres de Melo Federal University of Pernambuco, Brazil	54
Vinay Mohan K. D. Dental College and Hospital, India	41
Yousef Nasrawi Jordan Univeristy of Science and Technology, Jordan	59

UPCOMING CONFERENCES

7th Edition of International Conference on
Dentistry and Oral Health

April 27-29, 2023 | Orlando, USA

<https://magnusconferences.com/dental/>

8th Edition of International Conference on
Dentistry and Oral health

August 24-26, 2023 | London, UK

<https://dental-conferences.magnusgroup.org/>

Questions? Contact

+1 (702) 988-2320 or

Inquires: dental@magnusconference.com

For Registration:

<https://dental-conferences.magnusgroup.org/register>