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2nd Edition of

Dentistry

Virtual 2020

September 21, 2020

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DENTISTRY VIRTUAL 2020
BOOK OF ABSTRACTS

2ND EDITION OF

DENTISTRY VIRTUAL VIRTUAL 2020

SEPTEMBER 21, 2020

Theme:

Boosting Recent Advances in Dentistry and Oral Health

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Alice Kathleen Duke
Glasgow Dental Hospital and School,
UK

Anna Jodlowska
Medical University of Silesia,
Poland

Bhaven Modha
Central and North West London
NHS Foundation Trust, UK

Camila Paiva Perin
Universidade Tuiuti do Parana,
Brazil

Camilla Siqueira de Aguiar
Federal University of Pernambuco,
Brazil

Cristiane Lopes Miguel
Universidade Privada de Angola,
Angola

Eduardo Rubio
University of Buenos Aires,
Argentina

Juliana Francisca Grossi Heleno
Federal University of Minas Gerais,
Brazil

Krishna Vishwanathrao Patil
Bharati Vidyapeeth Deemed University Dental
College and Hospital, India

Lohana Maylane Aquino
Correia de Lima
Federal University of Pernambuco,
Brazil

Maria Jackson
University of Liverpool,
UK

Sergio Charifker
SOEPE,
Brazil

Sujatha P
Bharati Vidyapeeth dental College
and Hospital, India

Veena Naik
AIMST University,
Malaysia

Victor Leonardo Mello
Varela Ayres de Melo
Federal University of Pernambuco,
BrazilSpain

Thank You
All...

Keynote Speakers

Lawrence Yanover
University of Toronto,
Canada

Vinicius Gomes Machado
Brazilian Dental Association,
Brazil

Thiago de Almeida
Prado Naves Carneiro
University Center of the Triangle,
Brazil

Amarjeet Gambhir
Lady Hardinge Medical College
& Hospital, India

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 Dentistry Virtual 2020

"**Dentistry Virtual 2020**" during September 21, 2020 with the theme "Boosting Recent Advances in Dentistry and Oral Health" will offer you an impressive roaster of speakers, quality attendees and compelling content and is an excellent opportunity for leading academicians and scholars from universities and institutes to interact with the world-class scientists. You can increase your professional skills in this free time and discuss the practical challenges encountered and the solutions adopted.

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KEYNOTE FORUM

2ND EDITION OF

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Lawrence Yanover

Clinical Instructor (sessional), University of Toronto Faculty of Dentistry, Toronto, ON, Canada
Private Practice, St Catharines ON, Canada

Zirconia crowns for anterior pediatric restoration

Zirconia preformed crowns have become an excellent choice for the restoration of decayed primary anterior teeth. This presentation will review when zirconia crowns will be a good choice for restoring primary anterior teeth. It will review how to prepare the teeth to best fit the preformed crown and when pulp therapy should be considered. Management of gingival soft tissues will be discussed. A presentation of some available manufacturer crowns will be provided along with their features. Selection of crown size will be reviewed. Cementation materials will be reviewed as well as cementation protocol.

Take Away Notes:

- Clinical examples of pre and post treatment cases will be provided
- Strengths and weaknesses of these cases will be mentioned to assist in case selection and treatment to improve results
- Cases from three manufacturers will be shown to assist in choosing materials for clinical use

Biography

Dr Lawrence Yanover graduated from University of Toronto Faculty of Dentistry with a DDS (1977), Pediatric Dentistry (1982), PhD (1984). He completed a Medical Research Council of Canada Centennial Fellowship at Western University in 1986 and entered private practice. He has been a clinical instructor (sessional) at University of Toronto Faculty of Dentistry, lectured and published on pediatric dentistry as well as recently conducting clinical research on zirconia crowns with an international group of pediatric dentists.

Vinícius Gomes Machado

Private pratice at Gomes Machado Odontologia, Invited professor of restorative Dentistry of the post-graduation Specialization course of Brazilian Dental Association at the state of Espírito Santo/ ABO-ES, Brazil

Using intra-root fiber post retentors as an alternative to metal posts in aesthetic dentistry

The intra-root retentors were at first made of metal. The root cavities were prepared and impressed with an acrylic pattern, sent to a prosthesis laboratory who melted the acrylic pattern turning it into a metal piece to be cemented on the remaining root, with your posterior rehabilitation.

The acid eatching of dental structures make the adhesion trough resin-based fillings and dental structures possible. Attributed to that, the conservative concepts in dentistry grows in last years. The last decades developments in dental materials change the way we deal with remaining dental structure. The adhesive dentistry is getting simpler, as the new self-eatching adhesives and cementation materials becomes more common. The use of glass-fiber posts is an important ally for the maintenance of remaining dental structures, making direct resin fillings with wider appliance, making it more reliable and enhancing their longevity.

The day-by-day challenges in aesthetic dentistry got easier when we think in a new way, using restorative materials, which are similar to dental structures, in colour, translucency and mechanical behavior.

The intra-root preparations should still aim a biomechanical approach, despite the mechanical gains acquired with adhesive materials. Some mechanical principles must be respected. As the preparation of a half to two thirds of the infra bone root is still aimed.

Different shapes of glass-fiber posts can be applied to different situations, making the root preparations more conservative and safer.

As an additive advantage, divergent roots can be prepared and used on the intra root anchorage of rehabilitations, growing the mechanical resistance of the set.

The use of aesthetic post can be a helpful alternative to free-metal rehabilitations.

Take Away Notes:

- The principles of root preparation and a step by step of post cementation will be explained
- How to execute extensive restorations using direct filling materials, taking fiber posts as an adjunctive resource to the oral rehabilitations
- Introduce the concepts of free metal dentistry
- Reduce treatment consulting time avoiding prosthetic laboratory costs and issues

Biography

Dr. Vinícius was graduated in dentistry at Federal University of Juiz de Fora in 2001, during graduating participated of Saad – neo (assistance service to the diagnosis of neoplasias) extension program. Working on a private practice at Espera Feliz – Minas Gerais Brazi, since 2002

Specialist in implantology in 2007 at Brazilian Dental Association at the state of Minas Gerais, EAP-ABO/MG Muriaé-MG

Post graduated in restorative dentistry at EAP/ABO-ES with Marco Masioli's team with which he published the chapter "The challenge of color in aesthetic dentistry" at pro-Odonto post-graduation program.

Specialist in Dentistry in 2016 at EAP/ABO-ES, where he became invited professor.)

Thiago de Almeida Prado Naves Carneiro

Department of Fixed Prosthodontics, Centro Universitário do Triângulo, Uberlândia, MG, Brazil

Digital workflow in modern implant dentistry

The last few years have brought a technological revolution in Dentistry, computer systems are making everything faster and more accurate. Technology is evolving fast; many modern features have been introduced in the clinical practice and have shown incredible results.

The emergence of computerized tomography has revolutionized the image examination by the obtaining a better understanding of the anatomical structures and three-dimensional architecture of the maxillofacial skeleton. Associating the concept of 3D-Printing and CAD/CAM technology it becomes possible to generate prototyped surgical templates with high precision. This technology is based on real images of the bone anatomy obtained through CT scans and the design of a computerized prototyped surgical guide for implant placement. The CT scan images are manipulated on a specific software, enabling a virtual surgery, always looking for the best position, bone anchorage and of course, respecting the future prosthesis that these implants will receive. Guided surgeries are suitable for the most varying types of rehabilitation with implants, including edentulous patients, partial or single unit restorations. This technology has been widely used with scientifically proven success, to succeed with this therapy, achieving optimal aesthetic and functional results, we need a proper planning of the cases. Although it seems to be extremely easy and simple to perform, it requires a lot of expertise and experience of the involved staff, in addition to a detailed planning, avoiding any complications during the procedure. The guided surgery may be considered as a viable alternative for the rehabilitation of edentulous spaces within the correct indications.

Connected to the guided surgery, the CAD/CAM technology represents a major revolution within the current context of modern dentistry. It is now possible to generate a virtual model from the direct digital scanning from the mouth, models or even impressions, enabling the design and manufacture of dental protheses by computed process.

After the virtual model obtaining, the framework or restoration can be virtually designed on the software. The data is sent to a milling unit, which performs the process of materialize the designed digital project with high precision and a significant reduction of the clinical and laboratorial time.

Within the technological advances in implant dentistry it is possible to plan cases virtually, reducing errors and optimizing clinical outcomes. It is even possible to produce computerized surgical guides for faster and less invasive surgeries, accurate prosthetic restorations with high strength and in a great variety of materials. Despite all the advantages and convenience of CAD/CAM systems, the success does not depends only on the technology itself, as it involves several steps. All the involved clinical steps should be carried out seeking the success and the balance between the biological and mechanical factors.

Take Away Notes:

- Digital dentistry permits a better visualization and understanding of the patient, turning the virtual planning a powerful tool to success in implant therapy. It turns the patient's journey to the rehabilitation into a more accurate, predictable, safe and faster process

Biography

Graduated in Dentistry from the Federal University of Uberlândia - UFU (2010), Master in Dentistry / Implantology - UFU (2013), PhD in Dentistry / Implantology - UFU (2016) and Post-Doctorate in Dentistry - UFU (2017). He has a postgraduate degree in Periodontics and Implantology. He is a member of (NEPRO) CNPq - and the Brazilian Society for Dental Research (SBPqO). Worked as a Research Fellow at the University of North Carolina - USA (2012) and University of Michigan - USA (2015). Professor of the Dentistry undergraduate course at Centro Universitário do Triângulo and Coordinator of Specialization and Improvement courses in the areas of Implantology, Oral Rehabilitation and Digital Dentistry.

Amarjeet Gambhir

Faculty, Department of Dental & Oral Surgery, Lady Hardinge Medical College & Hospital, New Delhi, India

Artificial Intelligence in Dentistry & Oral Health Care

In the last few decades, the world has witnessed humongous technological advancement which has a notable influence on every aspect of human life. Artificial Intelligence, or AI, is described as any task performed by a machine or program that would have otherwise required a human thought process if carried out by one of us. As the capabilities of artificial intelligence continue to evolve, they stand to enhance every professional field, including dentistry & oral health care. The advent of AI technologies such as natural language processing, image recognition, neural networking and speech recognition has revolutionized the way dentistry is practised today. From the application of neural networks for early diagnosis & treatment of diseases & virtual reality based dental education system to the integration of virtual assistants for effective patient management & voice controlled smart dental chairs, artificial intelligence has widespread applications in different areas of dental practice. AI can serve as a useful modality in diagnosis and treatment of lesions of the oral cavity. It eliminates any observation fatigue and can be assimilated with other imaging systems like MRI and CBCT to detect minute changes thus improving accuracy in early diagnosis. The application of digitization, CAD/CAM technology and 3D printing has enormously enhanced the outcomes of restorative, prosthodontic & orthodontic treatment. The development of robotics and surgical navigation has made it possible to perform surgical procedures with more precision and accuracy & reduced morbidity. A very important and relevant application of AI is teleconsultation which can reduce the workload on healthcare workers particularly during emergency situations such as the ongoing Covid-19 pandemic. Despite the numerous advantages, AI has its own limitations with respect to potential misinterpretations, concern of patient privacy, lack of accountability in a clinical scenario, and high initial cost. It can only assist but in no way replace human intelligence and skill. Additionally, the awareness regarding artificial intelligence in dental industry is still at its nascent stage. However, considering the utilities and importance of AI in medical science, it is just a matter of time when it is going to occupy the core of oral health care.

Take Away Notes:

- Artificial Intelligence
- Its methods and components
- Applications of AI in various fields of dentistry
- Limitations & challenges in application

It will make the audience understand & acknowledge the applications of artificial intelligence technology in their day to day practice. It will also help them in incorporating this technology to improve the outcomes of various aspects of dentistry & oral health practices including:

- Dental education system
- Patient management
- Preventive dentistry
- Diagnosis & treatment of oral diseases

Biography

Dr Amarjeet Gambhir graduated in dentistry from GDC, Indore in 2002 & completed his post-graduation in Oral & Maxillofacial Surgery from NHDC, Mumbai in 2006. He completed his 3 year Senior Residency from Lady Hardinge Medical College & Hospital, New Delhi in 2009. He then worked as a faculty at different dental colleges and was promoted to Professor, Oral & Maxillofacial Surgery in 2016. He again joined Lady Hardinge Medical College as a Faculty in 2016. He has worked as a co-investigator in pilot project on school-based sealant programme 2017 under Ministry of Health & Family Welfare, Government of India. He is a reviewer of various international journals & has published more than 15 national & international papers in indexed journals. He has also authored 3 books for dental postgraduate entrance examinations.

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SPEAKERS

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Veena Naik[1]*, Saurabh Prakash[2]

[1]Associate Professor, Dept of Oral Medicine and Maxillofacial Radiology, AIMST University, Jalan Bedong, Semeling, Malaysia

[2]Associate Professor, Dept of Orthodontics, AIMST University, Jalan Bedong, Semeling, Malaysia

Prospect of oral medicine and the pedagogical deficiencies

International descriptions reflect that Oral Medicine is a specialty at the juncture of Medicine and Dentistry. Oral medicine is principally considered as medical specialty but ended up in dentistry, and now suffers an "identity crisis," bestriding both dentistry and medicine. We discuss the toil faced by the subject and the specialists in India and Internationally in the curriculum, at awareness level and the perseverance to change the consequence. Despite these apprehensions, we are quite passionate about the future. This enthusiasm is balanced by the realization that some impairments lie in our path. These collective signals are a clear wake-up call for our discipline.

Take Away Notes:

Gives the greater picture of challenges the subject Oral Medicine has

Gives ideas about the changes to be made in the subject for betterment of dentistry

Students who wants to pursue post-graduation in the subject will get a better overview

Will help improve the stance of the subject in dentistry

Biography:

Dr. Veena studied Bachelor of Dental Surgery (BDS) at SDM College of Dental Sciences (India) and graduated as MDS in 2011 AT Bapuji Dental College & Hospital, Karnataka (India). She then joined Department of Oral Medicine and Radiology in AIMST University, Malaysia in 2014. She obtained the position of an Associate Professor at the AIMST University in 2018. Being many publications under her credit, she completed few forensic tasks and community involvement like Anti-tobacco campaign, Treatment and awareness camps in central jail and Oral Health Awareness Campaign were accomplished in 2005, 2014 -2016.

Sujatha P

Department of Pediatric and Preventive Dentistry, Associate Professor, Bharati Vidyapeeth Dental College and Hospital (Bharati Vidyapeeth D U University) Sangli, Maharashtra, India

Hall's technique – Fix the tooth with caries in primary tooth

As the dentistry is having the shift from extension for prevention to prevention of extention, it is also a moving from drilling to no drill concept. Hall's technique is a non-invasive treatment for carious primary tooth. The concept recommended the use of Stainless steel crown. This technique does not involve administration of local anesthesia, no rubber dam application and no drilling. In essence there was no dental caries removal at all from the carious lesion. The technique relied on sealing the carious lesion in situ cutting off its supply of sugary substrate, thus altering the bacterial plaque of the lesion ultimately leading to the arrest of the caries process in the tooth. Hence, this presentation will throw the light on the detailed description of Hall's technique in pediatric dentistry.

Take Away Notes:

- The concept of Hall's technique which is the most upcoming non-invasive treatment procedure in Pediatric Dentistry
- In this pandemic COVID19, as in this technique there is no aerosol production it can be considered to be safe rather than preparing the tooth with conventional technique for stainless steel crown
- In Pediatric dentistry, treatment of children is quiet challenging hence the no drill, no anaesthesia hall's technique can be beneficial
- Hall's technique is one of the minimal aerosol, minimal interventional technique, no carious excavation technique that can help having great success of carious primary tooth

Biography:

Dr 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 postgraduation 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 5years.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 selected as 'Young Dentist in Pedodontics' award by Venus International Healthcare awards 2020.

Krishna Vishwanathrao Patil
Assistant Professor Bharati Vidyapeeth Deemed University Dental College and Hospital ,Sangli ,India

Dental implants in pediatric dentistry – To be burried or to blossom

Edentulism is usually associated with the aging patient. However, some children and adolescents have anodontia, partial anodontia, congenitally missing teeth and lost teeth as a result of trauma. The absence of teeth leads to loss of function and lack of normal alveolar growth, along with unpleasant esthetics that hamper the psychosocial development of the young child. In such cases, oral rehabilitation is required even before skeletal and dental maturation has occurred. Traditionally, the management of tooth loss in the young child is done by conservative means but none of those methods of treatment are completely satisfactory and have their own drawbacks. Dental implants for children are a new treatment modality and in a young child it would be an ideal mode of treatment for the absence of teeth. One of the main deterring factors for implant placement in children is the impending growth. Many authors have discussed the use of implants in children. Successful implant treatment in children has been achieved by several clinicians when they incorporated a multidisciplinary approach in their treatment plan. The design and type of implant system used in pediatric patients is also responsible for successful treatment outcome. Clinicians should have an understanding of the potential risks involved in placing implants in jaws that are still growing and consider the effect implants have on craniofacial growth. Dental implant insertion in pediatric and adolescent age group has been a debatable field of interest in rehabilitative pediatric dentistry

Take Away Notes:

- Purpose of this is to discuss application of dental implants for prosthetic rehabilitation
- The influence of maxillary and mandibular skeletal and dental growth on the stability of those implants in pediatric dentistry

Biography:

Dr Krishna Patil is Assistant Professor at Bharati Vidyapeeth (Deemed to be)University, Pune, India .He is currently pursing his Phd in the Paedatric Dentistry He has presented many National and International Papers at various Conferences . He has many National as well as International Paper a publication to his credit He was chairperson for many conferences. Currently, he is working on Preventive Paedatric Dentistry and clinical application of Dental Implants to prevent the malocclusion and as a natural space maintainer.

Kubra Aral

Republic of Turkey Ministry of Health, Uskudar Ahmet Yuksel Ozemre Oral and Dental Health Center, Istanbul, Turkey

The involvement of interleukin-11 in the pathogenesis of periodontal disease

IL-11 is an anti-inflammatory cytokine which plays important roles during immune response. Previously a significant reduction of IL-11 levels has been reported from periodontal health to disease clinically. The aim of the current study was to evaluate the potential role of IL-11 in the pathogenesis of periodontal disease by determination of IL-11 gene expression levels in human gingival fibroblasts (HGFs) in response to a major periodontal pathogen Fusobacterium nucleatum (Fn) in vitro. HGFs were cultured in a media containing DMEM/F12, 10% fetal bovine serum, 1% Penicillin and Streptomycin and 1% Amphotericin B. Fn (subsp. Polymorphum; ATCC 10953) was obtained anaerobically and diluted with DMEM/F12. HGFs were infected with Fn for 4 hours at 50 multiplicity of infection (MOI) in an antibiotic-free medium. Escherichia coli lipopolysaccharide (LPS) was used as a positive control. RNA isolation was performed and subsequently, cDNA was converted. Relative quantification levels of IL-11 were evaluated by real time-Polymerize chain reaction (rt-PCR). A significant downregulation (2fold) of IL-11 was detected in HGFs infected with Fn for 4 hours compared to control group. IL-11 may be dysregulated by Fn, a major periodontal pathogen, therefore may be involved a role in the pathogenesis of periodontal disease.

Take Away Notes:

- In addition to other interleukins, The potential role of IL-11 in the pathogenesis of periodontal disease
- IL-11 may be a significant target in periodontal disease
- Periodontal pathogens F.nucleatum may significantly dysregulate IL-11 in periodontal disease

Biography:

Dr Kubra ARAL has completed his PhD in Periodontology in Turkey and postdoctoral studies from University of Birmingham, UK. She has published more than 15 papers in reputed journals and has been a reviewer for high impacted journals in the field of Dentistry.

Maria Jackson
University of Liverpool, DCT 3, UK

How well are Salford Royal Foundation Trust (SRFT) community dental services risk assessing caries and applying and prescribing fluoride?

Introduction: The dental patients that are seen at SRFT services often have a high caries risk due to many different reasons such as an inability to brush properly through either a disability or living circumstances. In 2007 Public Health England published a toolkit for dentists with guidance of preventative aids to help reduce tooth decay which includes appropriate fluoride intervention for patients.

Aims and Objectives: The aims of this retrospective study and audit was to find out if SRFT dental services are following fluoride intervention guidelines for every patient or whether more can be done to ensure we are helping our patients to prevent tooth decay.

Methodology: 120 child and adult examination notes were assessed at random from 6 different dentists (20 from each). The criteria used to assess the notes was whether patient's oral hygiene status was documented, whether the patient had been caries risk assessed, and if high caries risk, was fluoride varnish or a fluoride prescription provided.

Results: 83% of notes at the patient's oral hygiene status documented, 82% of notes had been caries risk assessed and 49% of high caries risk patients had the appropriate fluoride intervention.

Conclusion: Improvements across all categories are required including what is documented in patient notes and following fluoride prevention guidelines to provide excellent care to our patients and help to reduce caries risk.

Biography:

Maria Jackson graduated from University of Liverpool in 2017 in Bachelor of Dental Surgery. She has since worked in a general dental practice, community dental service centre, 2 different dental hospitals and 3 different general hospitals. She is looking to specialise in Special care dentistry and is currently undertaking a DCT 3 year at Liverpool Dental Hospital.

Sergio Charifker Ribeiro Martins*, Leandro Lecio Lima de Sousa, José Ricardo Mariano

Post - Graduation Department, Unyleya - IODONTO, Brasilia, DF, Brazil

Immediate approaches for the failing tooth

The Prosthetic rehabilitation has evolved since the introduction of implant therapy. The implant protocol has changed through time, mostly because of the confidence in the new screw's surfaces, some allowing osseointegration after 21 days and biomaterial in special deproteinized bovine bone grafts with slowly resorption and different graft particles sizes, increasing the application. We can't believe, nowadays, in literatures that presents range near 99% of success in implant therapy and that is why, a question needs to be answered: Does it shows the clinical reality when we think about aesthetic results? In fact, there is now plenty of high-quality results (that´s the excellence dentistry era) associated with less time rehabilitation and less interventions (minimally invasive treatments), less manipulation with the patient, choosing tissues substitutes instead of autogenous bone. The most traumatic situation, that has significant psychological impact, is the failure of a tooth, mainly the anterior one. The rehabilitation of these cases can be accelerated and solved in one-time procedure, extracting the root, putting implant in position, filling the gap with bone substitutes and provisionalizing the prosthetic crown. While the posterior tooth doesn't need to have a provisional crown installed, because of the low aesthetic necessity, the space maintain and gingival architecture can be provided by personal healing cap, on the other hand, single appointment with the installation of provisional prosthetic crown is useful principally at the anterior maxillary teeth. Having said that, any tooth can be replaced by immediate implant after extraction, following rigid protocol as installing the screw inside the bone triangle, grafting when it is needed, both soft and hard tissue, respecting distances between implant/tooth and implant/implant, buccal/lingual position and depth. The natural tooth crown can be prepared and used as a temporary prosthesis with good biological results.

Take Away Notes:

- Explain the workflow used for the treatment of failing tooth, to create a routine in the clinic
- The use of immediate treatment minimizes the psychological trauma of losing tooth, and needs less appointments, with no need of sophisticated procedures
- The use of immediate approaches provides the maintenance of ridge architecture, and following the steps for good results, creates a pink/white esthetic simulating natural tooth
- Researches can be done in order to compare results of different biomaterial used to fill the gap between implant and buccal wall
- Comparative study can be performed to evaluate different implant design (aggressive/ non aggressive threads) and primary stability

Biography:

Dr. Sergio Charifker Studied Dentistry at the Federal University of Pernambuco, Brazil and graduated in 2003. In 2004 finished his first specialization course, Surgical Anatomy of the Face. Concluded the post-graduation in Oral and Maxillofacial surgery in 2008 and became oral and maxillofacial surgeon in the Brazilian Air Force. Today as a staff member at the trauma hospital in Campina Grande, which coordinates the maxillofacial team and residence preceptor. Received the master's degree in implantology in 2018 by studying the response of bone substitute in the grafted sinus. Since 2017 presents lectures in implantology area, and offers improvement course at SOEPE, in Recife. Member of the Board of Professors in the Master Program at Unyleya - IODONTO.

Sergio Charifker Ribeiro Martins*, Leandro Lecio Lima de Sousa, José Ricardo Mariano

Post - Graduation Department, Unyleya - IODONTO, Brasilia, DF, Brazil

Vertical ridge augmentation: Alternative approach for the severe atrophic alveolar ridge

One of the most challenging scenarios for the implantodontist is the treatment of severe atrophic alveolar ridge. It is well known that the crestal bone reduces volume after the tooth extraction and can retract the volume more than 50% in the first 6 months. The bone resorption can be accelerated by the use of prosthesis, compressing the reminiscent crest. Although there was a great improvement of the implant quality, and possibility to use nowadays short implants, for example 4mm long, still, the relation of implant/crown length is unbalanced. Another possible alternative therapy is the use of dentogingival prosthesis to camouflage the ridge deficiency. At the present time, the need of the increasing bone volume and height is an advantage to the implant stability and long-term maintenance. Not long time ago, the only way to obtain result was the use of bone blocks, most of them, autogenous. It used to be traumatic to the patient because it was needed a second surgical site for the removal of the graft. It was even worse when great reconstructions must have been redone and had to use an extra-oral approach. By the philosophy of: "simplicity is the ultimate sophistication", it is associated with the recent change of dentistry for the minimal invasive treatment, and excellent biomaterial found in dental industry. The grafting technique to create bone in critical defects became simpler and less traumatic. In fact, the necessity of autogenous bone is minimal, only to guarantee vital cell and bone induction. The association of autogenous particles with osteoconductive xenograft, those which have slow rate resorption in a 50/50 proportion inside a scaffold, created by a non-resorbable membranes (ptfe barriers) with titanium reinforcement, have improved considerably the graft perspective and creating a less invasive, less traumatic treatment, but with more predictable results.

Take Away Notes:

- Explain the workflow used for the treatment of severe atrophic alveolar ridge
- Use a less invasive technique providing a possibility to any kind of graft to be done in the clinic, without the necessity of general anesthesia
- Association of autogenous bone with xenograft causes less trauma to the patient, with minimal manipulation of the donor site, reducing the need of bone block and creating a more predictable result
- The vertical ridge augmentation technique still needs more investigations, as the communication of the graft to the periosteum, in order to increase the bone quality. This is not possible by the use of a ptfe barrier with titanium reinforcement, commonly used
- Comparative study can be performed to evaluate results of different techniques: using ptfe reinforced barrier or titanium mash in association of collagen membrane

Biography:

Dr. Sergio Charifker Studied Dentistry at the Federal University of Pernambuco, Brazil and graduated in 2003. In 2004 finished his first specialization course, Surgical Anatomy of the Face. Concluded the post-graduation in Oral and Maxillofacial surgery in 2008 and became oral and maxillofacial surgeon in the Brazilian Air Force. Today as a staff member at the trauma hospital in Campina Grande, which coordinates the maxillofacial team and residence preceptor. Received the master's degree in implantology in 2018 by studying the response of bone substitute in the grafted sinus. Since 2017 presents lectures in implantology area, and offers improvement course at SOEPE, in Recife. Member of the Board of Professors in the Master Program at Unyleya - IODONTO.

Lohana Maylane Aquino Correia de Lima[1]*, Victor Leonardo Mello Varela Ayres de Melo[1], Maria Luisa Alves Lins[1], Camilla Siqueira de Aguiar[2], Rodrigo Henrique Mello Varela Ayres de Melo[3], Deise Louise Bohn Rhoden[4], Milena Mello Varela Ayres de Melo Pinheiro[5], Jussara Diana Varela Ayres de Melo[6], Nely Dulce Varela de Melo Costa Freitas[7], Neme Portal Bustamante[8], Juan Carlos Barrenechea Montesinos[9], Elvia Christina Barros de Almeida[10], Zélia de Albuquerque Seixas[11], Ricardo Eugenio Varela Ayres de Melo[12]

[1]Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[2]Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[3]General Surgeon, Ministry of Health Brazil, Rio Grande do Sul, Brazil
[4]Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil
[5]Physiotherapist, COOPFISIO, Recife, Pernambuco, Brazil
[6]Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil
[7]Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil
[8]College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru,
[9]Dental Health of the Army of Peru, Peruvian Army, Lima, Peru
[10]College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[11]College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[12]Head 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 maxila with mucous flap reconstruction

Low-grade polymorphous adenocarcinoma is a malignant neoplasm of salivary glands with uncommon occurrence in the head and neck region, almost exclusively affecting minor salivary glands. While this condition has typical clinical pathological signs, it commonly presents low biological damage potential. The lesions occur more frequently among elderly females between the sixth and eighth decades of life, with a higher prevalence for the hard palate, soft palate and, most regularly, the upper lip and jugal mucosa. The clinical and histological differential diagnosis of this condition is between pleomorphic adenoma and adenoid cystic carcinoma. The most indicated surgical treatment is extensive surgical excision, eventually including resection of the underlying bone. Although infrequent, there may be metastasis for regional lymph nodes. Radical dissection of the neck is not indicated unless there is clinical evidence of cervical metastasis. This study reports a case of a surgical excision of polymorphous adenocarcinoma in the maxilla with mucous flap reconstruction. A 63-year-old white male patient sought the Maxillofacial Surgery and Traumatology Service at the Federal University of Pernambuco in the Clinical Hospital, complaining of a tumor-like lesion in his left maxilla, which gradually increased in volume. At the extra-oral clinical examination, the patient presented a slight increase in volume. 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, normochromic, with 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 (CT) 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. The final considerations are that low-grade polymorphic adenocarcinoma is a rare malignant neoplasm that affects the salivary glands whose potential for malignancy, recurrence and metastasis are relatively low.

Take Away Notes:

- Definition of polymorphous adenocarcinoma
- Clinical and histopathological characteristics of polymorphous adenocarcinoma
- Forms of treatment
- Description of a case report
- The dental surgeon must know how to identify neoplasms and their forms of treatment, avoiding worse stages of pathologies

Biography:

Academic in Dentistry in Federal University of Pernambuco, Brazil; Currently, she is an intern at Ambulatory of Maxillofacial Surgery and Traumatology Service in the Clinical Hospital 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 Venturo-sa-Pernambuco-Brazil. In 2019, she won several awards for presentations of scientific works and was invited by the Peruvian army to give a conference at the 30th National Congress of Military Police Dentistry "Ejército del Perú".

Alice Kathleen Duke
Glasgow Dental Hospital and School, Dental Core Trainee, UK

Advances in Endodontic Microsurgery: A Review of the Literature

Background: A persistent periapical lesion should be addressed by orthograde re-root treatment as a first line therapeutic intervention, excluding cases of rare developmental cyst or tumour. In selected cases where endodontic treatment or retreatment is contraindicated a surgical approach to management of the peri radicular tissues may be considered. Within the last decade there have been significant advancements in endodontic microsurgery and an associated rise in clinical success rates. This can be accounted to improved visibility and illumination, the development of more biocompatible root-end filling materials i.e. slow- and fast-setting mineral trioxide aggregate (MTA) materials and the integration of cone bean tomography in endodontic treatment planning.

Aim: To review the current available literature on modern endodontic microsurgery

To review clinical outcomes and associated factors in endodontic microsurgery compared to traditional root end surgery

Methods: A literature review was conducted using online libraries MEDLINE, Embase, Cochrane library, CENTRAL and relevant endodontic, restorative and traumatology journals using a detailed search strategy. References of included studies were hand searched.

Conclusions: Despite a lack of large-scale randomised clinical trial the probability of success for endodontic microsurgery (EMS) compared to the outcomes was significantly greater. This is in accordance with the recent publication of Guidelines for peri radicular surgery, Clinical Standards Committee of the Faculty of Dental Surgery, Royal College of Surgeons of England (FDSRCS). These findings should be considered in the future management of clinical cases and regional patient referral protocols.

Camilla Siqueira de Aguiar[1]*, Victor Leonardo Mello Varela Ayres de Melo[2], Maria Luísa Alves Lins[2], Lohana Maylane Aquino Correia de Lima[2], Frederico Marcio Varela Ayres de Melo Junior[3], Bruna Heloísa Costa Varela Ayres de Melo[3], Júlia de Souza Beck[3], Rodrigo Henrique Mello Varela Ayres de Melo[4], Deise Louise Bohn Rhoden[5], Milena Mello Varela Ayres de Melo Pinheiro[6], Jussara Diana Varela Ayres de Melo[7], Nely Dulce Varela de Melo Costa Freitas[8], Neme Portal Bustamante[9], Juan Carlos Barrenechea Montesinos[10], Elvia Christina Barros de Almeida[11], Zélia de Albuquerque Seixas[11]; Jorge Pontual Waked[12], Hudson Augusto Carneiro Fonseca[13], Irani de Farias da Cunha Júnior[11], Ricardo Eugenio Varela Ayres de Melo[14]

[1]Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[2]Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[3]Undergraduate dental student, Maurício de Nassau University, Natal, Rio Grande do Norte, Brazil
[4]General Surgeon, Ministry of Health Brazil, Rio Grande do Sul, Brazil
[5]Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil
[6]Physiotherapist, COOPFISIO, Recife, Pernambuco, Brazil
[7]Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil
[8]Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil
[9]College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru
[10]Dental Health of the Army of Peru, Peruvian Army, Lima, Peru
[11]College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[12]College Professor of Dentistry Course, Federal University of Campina Grande, Patos, Paraíba, Brazil
[13]College Professor of Dentistry Course, UNIFACOL, Vitória de Santo Antão, Pernambuco, Brazil
[14]Head 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

Craniofacial fracture produced by white weapon: Surgical reconstruction

Introduction: Facial trauma can be considered one of the most devastating aggressions found in trauma centers due to emotional and its possibility of permanent aesthetic deformity. It affects the male population more in the proportion of 3:1 and the age group withthe highest prevalence is the third decade of life. Regarding the etiology of facial trauma, we observed that it happens more due to car accidents. Other causes include gunshot wounds, assaults, domestic accidents, and sports trauma. As sequel of facial trauma, anti-aesthetic scars and facial paralysis are seen as the most frequent.

Objective: This study aims to report the surgical case of facial reconstruction of a patient who was physically assaulted by a white weapon.

Case Report: Male patient, 20 years old, melanoderma, victim of physical aggression by stabbing weapon, was referred to the trauma reference service in the city of Recife - Pernambuco, does not qualify for care according to the rules of Advanced Trauma Life Support - ATLS. In the anamnesis, it was observed that the patient had a conscious, drunk, eupneic, normal color 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 bone fragments within the orbital cavity. After the clinical examination and the imaging

analysis of the axial cut tomography, the treatment plan was based on the cleaning and cauterization of the bleeding vessels of the wound and reconstruction of the tissues by planes, under general anesthesia, where he was operated first by neurosurgery and later, by Buco Maxillofacial Surgery and Traumatology Team. During facial reconstruction, hemostasis of the wounds was performed, debridement of devitalized tissues, removal of foreign bodies and bone spicules, reduction of fractured bones through the wounds themselves, promoting stabilization through steel wires and rigid internal consolidation, with plates and screws, trying to return the contour of the orbit and the zygomatic region, leaving them as close to normal as possible, despite the loss of substance. The bone fragments contained within the orbital cavity caused injury to the left eyeball, with destruction and loss of vitreous humor, causing amaurosis and loss of the left eyeball. Subsequently, the flaps were positioned and the suture in layers 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 packing due to the presence of rhinorrhagia and after 90 days of follow-up, there was a satisfactory facial symmetry, but requiring the placement of an ocular prosthesis to improve the patient's low self-esteem, due to damage psychological and emotional problems suffered from the trauma, in an attempt to get him back to normal social life

Conclusion: The success of the treatment depends on the correct handling of the lesions right after the trauma. In the case cited, a satisfactory bone consolidation was achieved, reestablishing the patient's function and aesthetics, including rehabilitation through an ocular prosthesis, with no postoperative complications. It was found that the rapid multidisciplinary and multidisciplinary intervention, combined with a correct surgical technique, guarantees the patient's good prognosis.

Take Away Notes:

- Definition, etiology and epidemiology of trauma
- Sequelae of trauma
- Description of the surgical case
- Treatment depends on the correct handling of the lesions, aiming at the esthetic and functional reestablishment of the patient
- Need for a multidisciplinary and multidisciplinary approach

Biography:

Master degree student in dental clinics in Federal University of Pernambuco, Brazil; Currently, she is an intern at Ambulatory of the Buco Maxillofacial Surgery and Traumatology 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/PE. In 2018 and 2019, she won several awards for presentations of scientific works and was invited by the Peruvian army to give a conference.

Victor Leonardo Mello Varela Ayres de Melo[1]*, Lohana Maylane Aquino Correia de Lima[1], Maria Luisa Alves Lins[1], Camilla Siqueira de Aguiar[2], Rodrigo Henrique Mello Varela Ayres de Melo[3],Deise Louise Bohn Rhoden[4], Milena Mello Varela Ayres de Melo Pinheiro[5], Jussara Diana Varela Ayres de Melo[6], Nely Dulce Varela de Melo Costa Freitas[7], Neme Portal Bustamante[8], Juan Carlos Barrenechea Montesinos[9], Elvia Christina Barros de Almeida[10], Zélia de Albuquerque Seixas[10], Ricardo Eugenio Varela Ayres de Melo[11]

[1]Undergraduate dental student, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[2]Master degree student in dental clinics, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[3]General Surgeon, Ministry of Health Brazil, Rio Grande do Sul, Brazil
[4]Doctor, Pathologist, Lutheran University of Brazil, Rio Grande do Sul, Brazil
[5]Physiotherapist, COOPFISIO, Recife, Pernambuco, Brazil
[6]Physiotherapist, Faculty of Communication Technology and Tourism, Olinda, Pernambuco, Brazil
[7]Physiotherapist, University Maurício de Nassau, Recife, Pernambuco, Brazil
[8]College Professor of Dentistry Course, University National Federico Villarreal, Lima, Peru
[9]Dental Health of the Army of Peru, Peruvian Army, Lima, Peru
[10]College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[10]College Professor of Dentistry Course, Federal University of Pernambuco, Recife, Pernambuco, Brazil
[11]Head 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.

Take Away Notes:

- 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 Congresso Internacional de Odontología and for I Jornada Internacional Multidisciplinaria de Estomatología Peruano Brasileira by Peruvian army.

Bhaven Modha
Hillingdon Community Dental Referral Service, Central and North West London NHS Foundation Trust, Uxbridge, Hillingdon, England UK

Engaging in community initiatives: A dentist's experience from a West London Borough

As a dentist at the Hillingdon Community Dental Referral Service, the author treated the dental needs of patients that required special care dentistry. The author also learned more about epidemiology, dental public health strategies, and the demographics of the West London Borough of Hillingdon.

The author was concerned about Hillingdon's high levels of caries exceeding that of the national average, and that Hillingdon has the second highest rate of caries in five-year olds within London. The author felt a need to help raise awareness of the importance of good oral health within the community. Taking an active interest in the work of dental health educators, the author volunteered to collaborate with them.

On Friday 17th November 2017, the author and senior dental health educator partook in a school visit to Pinkwell Primary School in the town of Hayes. Informal, lively and interactive lessons were given to each class, targeting the varying age groups. The aim was to show the children that the dentist is not an intimidating figure, and is instead, caring and approachable.

By networking with general dental practitioners in Hillingdon, a general dental practitioner based in Hayes was able to share their worries about the poor dental health of their many patients. Together with this general dental practitioner, the author and senior dental health educator implemented an oral health awareness event at Hayes Town Mosque on Friday 5th January 2018. This event took place during Friday prayers, enabling interactions with as many worshippers as possible.

It has been reported that the prevalence of dental caries related to long-term bottle use is higher in Hillingdon than the national average. Thus, the author and senior dental health educator held a 'bottle-to-cup' themed event on Friday 29th June 2018 at Coteford Childrens' Centre in the town of Eastcote. The aim of this initiative was to educate pregnant persons, parents and caregivers on caries prevention in babies, infants and children.

During National Heart Month in February 2019, the author and a dental health educator participated in the annual Uxbridge Health Fair, which took place at Uxbridge Library in the town of Uxbridge on Friday 1st February 2019. Visitors were welcomed to the dental stall; they were provided with oral hygiene and preventative advice, answers to dental questions, and offered free dental samples. The aim of such event was to stress upon the link between poor periodontal health and heart disease.

Such initiatives enable increased interactions or touchpoints with members of the community. Multichannel marketing, thus occurs, which can be beneficial for dental organisations. To help improve the oral health of Hillingdon's young and old, the author has experienced the importance of collaborating with other stakeholders and going beyond the immediate clinical setting. Tackling Hillingdon's high level of caries is likely to require huge efforts. However, as per Helen Keller's quote: "*I long to accomplish a great and noble task, but it is my chief duty to accomplish small tasks as if they were great and noble.*"

Take Away Notes:

- The importance of knowing about the community that one works in to gain an awareness of how social and demographic factors can impact on patients' dental health

- Using one's position and privilege as a dentist or allied professional to implement relevant community initiatives that will be of benefit to the public
- Partaking in community initiatives may enhance soft skills, and strengthen teamworking and bonding
- Such events could allow one to 'think outside of the box' and experience a side of dentistry beyond the clinical setting
- Community initiatives may have the added advantage of acting as a multichannel marketing tool, and as a touchpoint for attracting new patients

Biography:

After qualifying as a dentist in 2012 from Peninsula College of Medicine and Dentistry, Universities of Exeter and Plymouth in the Southwest of England, UK, Dr Bhaven Modha has had both a varied and unique mix of experience in dentistry. From gaining worthwhile skills and experience from several general dental practices, Bhaven's journey in dentistry has also included dentist positions in secure units to include prisons and immigration removal centres; special care community clinics, university and educational establishments, and as a senior dentist overseas.

Camila Paiva Perin
Department of Endodontics, University Tuiuti do Paraná and Ilapeo Institute, Curitiba, Paraná, Brazil

Magnifying to be minimally invasive: Optimizing the success of parendodontic surgery in the microsonics concept

Conventional apical surgery was originally indicated as the last alternative for endodontic reintervention, for unsuccessful situations after retreatment or, exceptionally, when retreatment was made impossible by the presence of prostheses and posts. In order to increase the success predictability and indicate apical surgery as the first option in some situations when root canal retreatment is contraindicated, many aspects of its execution have been improved. This whole protocol is possible with the Microssonics concept, which combines the magnification and illumination provided by the operating microscope or magnifying glasses and photophores and the use of piezoelectric ultrasonic, used from the cutting bone to the root end preparation and filling. With the improvement of lighting and visibility provided by the magnification equipment, the incision extension and osteotomy are reduced, resulting in less invasive and more comfortable procedures for the patient. In addition, the magnification provides the necessary visibility for the proper inspection of the apex, from the root resection in its total extension at zero angle, visualization of areas not touched by endodontic instruments at the cut root surface, such as constrictions and flattenings in maxillary premolars, mesiovestibular roots of maxillary molars and mesial roots of lower molars, microcracs, fractured instruments, among others. For minimally invasive, safe access and with reduced tissue trauma, piezoelectric ultrassonic has come to complete the microsurgery technique. For that, many equipments with intelligent waves and adjustable power offers precise cutting of hard tissues, without traumatizing soft tissues, providing a safe and minimally invasive surgical environment. Finally, the use of sealers with biocompatible and bioactive characteristics, such as repairing bioceramics, offer excellent apical sealing, in addition to potent antimicrobial properties, derived from its alkaline pH. Therefore, apical microsurgery under the microsonics concept has a high predictability of success, and should be performed when conventional root canal retreatment is contraindicated due to difficulties in access, for resolution of iatrogenesis or due to the impossibility of adequate cleaning of the apex.

Take Away Notes:

- Differences between conventional apical surgery and apical microsurgery, predictability of success in teeth with apical periodontitis, indications and technique will be presented, in the microsonics concept
- Apical microsurgery will be presented as a viable alternative for teeth with apical periodontitis, with a minimally invasive execution technique and with high success rates
- Often, reintervention in the treated root canals that remain with apical periodontitis is not successful. With the aid of magnification, using magnifying glasses and optical microscopes, combined with the use of piezoelectric ultrasonic for a safe and minimally invasive technique, it is possible to solve pathological situations with greater efficiency and predictability of success. In this lecture, the technique for solving some situations of endodontic failure will be addressed through a simple reproducible technique for performing apical microsurgery

Biography:

Prof. Dr. Camila Paiva Perin is Dentist graduated by the Federal University of Paraná - Brazil, Specialist (Sp), Master (Md) and Doctor (PhD) in Endodontics and specialist in Public Health. She is tutor of the Dentistry Course at the University Tuiuti of Parana -Brazil, in the disciplines of Endodontics, Collective Health and Dental Clinic, as well as being a Coordinator of the Endodontics Specialization Course at the same University. She is professor of Ilapeo institute and PerinMattos Endodontic Training Institute too. She is Dentist of the Unified Health System (SUS - Brazilian public health service) in the city of Curitiba - Paraná - Brazil. She has experience in the area of Dentistry, with emphasis on Endodontics and Public Health, working mainly on the following topics: dental trauma, regenerative techniques in Endodontics, Endodontics in Public Health and apical microsurgery.

Juliana Francisca Grossi Heleno[1,6]*, Juliana Beirigo Araújo[1], Andrea Pintor[2], Bernado Almeida[3,6], Giselle Nevares[4], Renata Costa Val Rodrigues[5,6], Renata Perez Macedo[6], Warley Silva[6]

[1]Divisão de Odontologia Hospitalar, Beijamim Guimarães Foundation, Federal University of Minas Gerais, Belo Horizonte, Minas Gerais, Brasil

[2]Department of Pediatric Dentistry and Orthodontics, School of Dentistry, Federal University of Rio de Janeiro, Brazil

[3]Department of Endodontics, Faculty of Dentistry, Estácio de Sá University, Rio de Janeiro, Brazil

[4]Department of Endodontics, Center of Studies and Researches in Dentistry/COESP, João Pessoa, Paraíba, Brazil

[5]Department of Endodontics, Faculty of Dentistry, Veiga de Almeida University, Rio de Janeiro, Brazil

[6]Department of Endodontics, North of Minas United Faculty, Ipatinga, Minas Gerais, Brazil

Role of the hospital dentist in the repair of oral lesions of serious patients with COVID-19 in intensive care units: A multidisciplinary approach

The New Coronavirus, responsible for the pandemic of the disease COVID-19, with epicenter in Wuhan, China, since December 2019, has caused a disease whose main symptoms include fever, cough, myalgia, fatigue, dyspnea and abnormal computed tomography images of chest. Of the total number of infected patients, 5% of these can develop severe forms of the disease, requiring treatment in the Intensive Care Unit. These patients can more easily develop the so-called Acute Respiratory Insufficiency Syndrome and about 2/3 of the patients require ventilatory support, and includes people over 60, patients in morbid conditions such as diabetes, heart disease, previous respiratory diseases and children in perinatal age. During orotracheal intubation, some pathological changes such as mechanical trauma to the oral mucosa, xerostomia, immunosuppression and adverse effects of medications, combined with poor dental condition, can cause oral lesions, which can become a gateway for other viruses, bacteria and pathogens fungal and aggravate the patient's state of health, and can even lead to death. A literature review was carried out in July 2020 on international bibliographic bases, with the objective of retrieving the most up-to-date evidence in the approach to care in patients with severe Covid-19 undergoing Orotracheal Intubation who had lesions and infections in the oral cavity. Through mechanical oral antisepsis, laser therapy and minor surgical procedures at the bedside, there was a reduction in infectious foci in the oral cavity and oropharynx, reducing the parameters of leukocytosis and RT-PCR. The proposed approach could contribute to the management of critically ill patients with Covid-19 in Intensive Care Units, improving the patient's oral condition and, consequently, the clinical evolution parameters, anticipating the discharge from the Intensive Care Units, favoring care other critically ill patients awaiting care, increasing the number of patients seen. In addition, the impact of this dental care, minimizes hospital costs and anticipates hospital discharge, thus improving the prognosis of the disease and increasing the survival of these patients.

Take Away Notes:

- The dentist's performance in the Intensive Care Units can improve the prognosis of Covid-19 disease in critically ill patients
- Dental care is essential for patients with COVID-19 due to oral changes that occur over a long period of intubation, such as oral sores on the lips and tongue, bleeding or mechanical trauma resulting from biting or caused by mechanical ventilation
- Oral hygiene in ICU patients is deficient and allows colonization of oral biofilm by pathogenic microorganisms, especially respiratory pathogens, which can substantially increase the risk of developing nosocomial pneumonia
- The attendance and control of oral infections by the dentist effectively contribute to the recovery of patients with the new coronavirus admitted to the Intensive Care Units and anticipates hospital discharge

- The great challenge of our time is to overcome this unstable and fearful scenario that Covid-19 brought, in addition to the high risk of contamination by health professionals, it becomes necessary for this to involve and unite the entire multidisciplinary team to increase the survival of critically ill patients

Biography:

Graduated in Dentistry from PUC-MG, Brazil; Academic highlights PUC-MG 1997, 1998 and 1999 Postgraduate in Pediatric Dentistry by UFMG, in Fixed Prosthodontics and Periodontal Surgery UNIP-SP, Brazil, and Implantology, in Brazil. Qualification in Hospital Dentistry at Albert Einstein Hospital -SP, Brazil and Laser in USP, SP. Dental Surgeon at Hospital da Baleia - BH, Brazil. Professor of Endodontics at FUNORTE - MG, Brazil. Master in Endodontics and PhD student in Oral Pathology in UFMG, Brazil. In 2018, she received the award for best poster of this important event.

Rubio Eduardo DDS PhD[1]*, Nanni Gisela DDS[2], Mombru Mariano[3]

[1]Head of Oral and Maxillofacial Program, Argentinian Catholic University, Argentina

[2]Head of Clearsmile Orthodontist at the University of Buenos Aires, Argentina

[3]Adjunct Professor of the Postgraduated Program of the Argentinian Catholic University, Argentina

Virtual planning in orthognathic surgery

During the past decade, oral and maxillofacial surgeons, as well as orthodontist use to plan their treatments in a very different way. The gold standard included manual or computer cephalometric analysis, articulated cast, and patients' lateral face pictures.

Even though the final results were very accurate, neither the patient no the doctor could evaluate the third dimension.

When 3D virtual surgery soft wares appeared, the postop facial appearance could be completely evaluated, and corrections to the occlusal plane could be possible with a very short mistake.

The aim of this presentation is to describe and analyze the workflow process of 3D virtual surgical planning in orthognathic surgery, emphasizing the main advantages regarding orthodontics and surgical treatment outcomes. The perspective is based on author´s experience and current literature. Many topics are included in order to provide basic aspects and pitfalls for virtual surgical planning in orthognathic surgery.

The authors will analyze the differences between the manual orthognathic planning and the virtual 3D planning.

The perspective of the future changes related with cutting guides and customized plate systems will be discuss in this lecture as well.

Take Away Notes:

- The advantages of using a 3D planning in the dental practice
- A very easy way of recording all the parameters that the programs needs as input
- The pros and cons of the virtual systems
- The way of interact with other doctors as well as with bioengineers

Biography:

Dr Eduardo Rubio, DDS (1980) and PhD (1983) from the Dentistry Faculty. University of Buenos Aires. Oral and Maxillofacial Surgeon. Master in Health Care Administration. Dr Rubio is Adjunct Professor of Oral and Maxillofacial Surgery pre graduate program at the University of Buenos Aires, and Head of the Post graduated program on Oral and Maxillofacial Surgery in the Catholic Argentine University. Dr Rubio is specialized in Orthognathic Surgery. He lecturer in more than 80 courses, 100 conferences. He published more than 30 articles.

Cristiane Lopes Miguel
Faculty of dentistry, Private University of Angola, Luanda- Angola

Direct resin restoration with addition of diatomite in anterior teeth- Case report

The evolution of restorative materials, the relentless search for dental aesthetics and the need for immediate results by patients, leads dentists to apply increasingly sophisticated techniques and accessible to all pockets.

As a result, there was an increase in the aesthetic demand in dentistry, the search for better quality and durability of composite resin restorations. The Zirconfill resin has a differentiated material, diatomite[1].

Diatomite is a mineral raw material of sedimentary and biogenic origin, constituted from the accumulation of diatom algae shells that have been fossilized, since the Precambrian period, by the deposit of silica on its structure. The fixation of this silica by diatomaceous algae is related to the geochemical cycle of clay decomposition, serving as part of the structural material for these algae[2]

Zirconfill is classified as a nano-hybrid, in its composition it has the same monomers as Filtek Z250, in addition to mixed zirconia and silica oxide particles that give the resin a characteristic thixotropism.

According to the manufacturer, Zirconfil presents an excellent polymerization contraction index; high mechanical resistance; superior degree of conversion of monomers; excellent workability and surface smoothness; excellent optical characteristics and superior mimicry[3]. The diatomite particles, because they are porous, allow the monomer to percolate, aiming to improve its properties, which makes this resin differentiated[4]

The case is of a 29-year-old female patient, who expressed the desire to rehabilitate her smile in a short time, as she would be married in 15 days but would like to do so in an economical and most conservative way possible without using the dental appliance. Clinically, conoid lateral incisor teeth and canine to canine diastemas are observed. In the present clinical case, as a young patient, we opted for a conservative treatment, using direct restorations in composite resin to improve the function and aesthetics of your smile.

Take Away Notes:

- Apply a new type of resin in everyday clinical practice
- Use a material that can diversify the possibilities of aesthetic treatments
- Give to the patients an improved material with a best cost –benefit
- Make a continuous improvement of the quality of the resin with the addition of diatomite
- Allow possible increase in resistance, color stability and quality of restoration
- Use of a resin applicable for restorations for both anterior and posterior teeth

Biography:

Cristiane Lopes Miguel graduated in Dentistry at Veiga de Almeida University in Brazil, Class of 2014. She is specialized in Public health by the Federal University of Rio de Janeiro in 2015. Made the Master degree in Dental Medicine at Fernando Pessoa University. She is currently coursing her pHD in Preventive Dentistry at Porto University in Portugal. Her research interests areas include preventive dentistry, public health and oral health promotion. Work as Teacher of Aesthectic Dentistry at Private University of Angola. Besides that is a regular speaker and one of the national trainers of COVID-19 prevention in Angola.

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POSTERS

2ND EDITION OF

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Bhaven Modha
Hillingdon Community Dental Referral Service, Central and North West London NHS Foundation Trust, Uxbridge, Hillingdon, England UK

Using educational strategies to build a successful post-registration course in orthodontics

Whilst teaching the National Examining Body for Dental Nurses' (NEBDN) Certificate in Dental Radiography at Professional Dental Studies College, the author received a prized opportunity, in September 2017 to teach a new post-registration course, the NEBDN Certificate in Orthodontic Dental Nursing. By seizing this opportunity, the author could utilise their interest in orthodontics, contribute to the orthodontics profession, and share their expertise by teaching dental care professionals. The course is specifically for dental nurses that work with orthodontists, and want to increase their skillset and knowledge base.

Taking a similar approach to the Certificate in Dental Radiography, the Certificate in Orthodontic Dental Nursing course entails eight five-hour classes, over a six-month period. The first six classes focus on the academic and theoretical aspects of the course, whilst the final two classes involve mock examinations and consolidation. The students would take the official NEBDN qualification exam thereafter.

The NEBDN syllabus was studied closely, and learning points were grouped together, based on their connections. From this, the author highlighted six major themes: (i) introduction and building upon pre-existing dental knowledge; (ii) growth and development in relation to orthodontics; (iii) diagnosis in orthodontics; (iv) orthodontic appliances; (v) risks of orthodontic treatment; (vi) interdisciplinary orthodontics. The course was, thus arranged in a systematic manner. The learning approach of constructivism, which asserts that all knowledge is constructed from a learner's previous knowledge, played a major role. The author structured the course in a way that students would recollect their pre-existing knowledge of dentistry, and build upon this with new knowledge, which increased in complexity as they progressed through the course.

The Certificate in Orthodontic Dental Nursing is both a challenging and demanding course. Not only does it involve theoretical learning and a final examination, it involves a huge coursework component involving an array of written and practical tasks that must be completed satisfactorily. Thus, it was imperative that the course incorporated educational strategies that promoted success. These included: establishing early ground rules and principles; fostering an inclusive and learner-centred environment; using quizzing and testing regularly; engaging in case-based discussions; giving regular feedback; undergoing regular self-reflection, and receiving peer observations from the college principal, among others.

As a new course being delivered and managed for the first time, the author often wondered whether it would be successful, and whether the students would be successful. However, all students from this first cohort passed the course successfully; each student was awarded the NEBDN Certificate in Orthodontic Dental Nursing qualification. This was a great achievement, and the course continues to be successful.

Take Away Notes:

- The importance of teaching, training and mentoring members of the dental team
- The increasing use of skill-mix, and extended duties of dental nurses to support the modern orthodontic setting
- The use of various educational strategies to design and implement a post-registration course in dentistry
- Using one's position and privilege as a dentist or allied professional to share their knowledge and expertise with members of the dental team

Biography:

After qualifying as a dentist in 2012 from Peninsula College of Medicine and Dentistry, Universities of Exeter and Plymouth in the Southwest of England, UK, Dr Bhaven Modha has had both a varied and unique mix of experience in dentistry. From gaining worthwhile skills and experience from several general dental practices, Bhaven's journey in dentistry has also included dentist positions in secure units to include prisons and immigration removal centres; special care community clinics, university and educational establishments, and as a senior dentist overseas.

Anna Jodłowska, Lidia Postek-Stefańska
Medical University of Silesia, Poland

Tooth development in the light of chemotherapy induced agenesis in cancer survivors

Introduction: The duration of sensitive to impairment developmental stages in tooth formation is not well documented due to unknown time of environmental factor impact. Dental abnormalities are the long term sequelae of antineoplastic therapy. Time and by the same token age of chemotherapy administration is accurately recorded.

Background: Agenesis is the term describing missing tooth and it is usually considered as a lack of tooth germ development. Complete damage to the germ during early odontogenesis is likely to occur. This phenomenon is sometimes distinguished as aplasia. There is not enough information resulting from detailed comparative research on the age at antineoplastic therapy and succeeding dental disturbances.

Case Reports: 38 cancer survivors were invited to dental examination. The clinical control and panoramic radiographs have revealed 5 individuals who had 13 teeth missing: 2 lateral incisors, one first premolar, 5 second premolars, 3 second molars and 2 third molars. Three of them had teeth with other dental abnormalities, such as microdontia, reduction in crown size, root stunting.

Follow-Up: In majority of cases the chemotherapy overlapped the period of expected early development from the beginning of tooth bud formation up to the moment before mineralization. One survivor, who has 4 second premolars missing and has been treated after the expected time of early odontogenesis, presented one year-late eruption of first deciduous teeth and late dental age at time of examination.

Conclusion: Tooth germ seems to be prone to complete cytotoxic damage during the whole long period of early development. Wider analysis is required.

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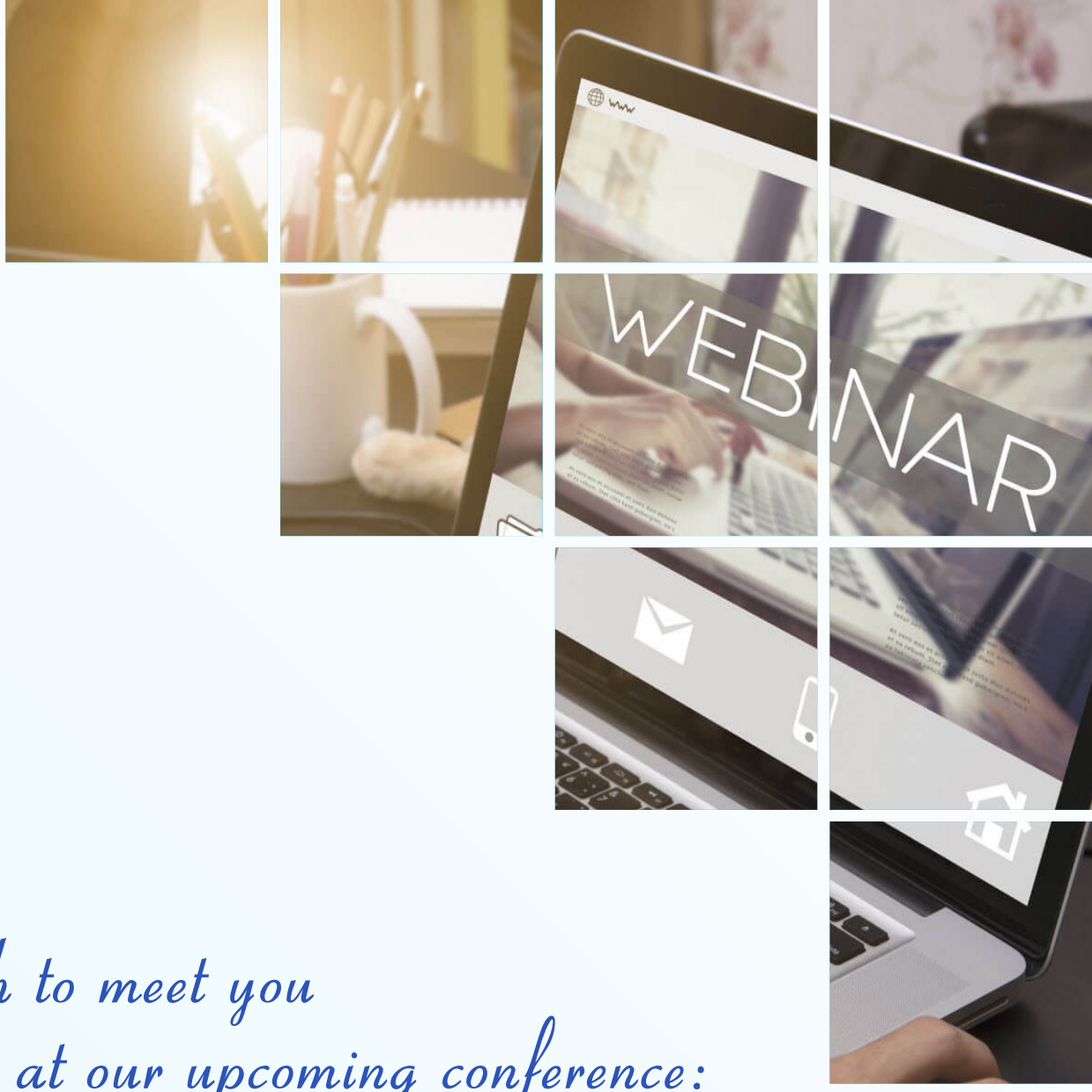

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