30th American Dental Congress
&
6th American World Dentistry Congress

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SCIENTIFIC TRACKS & ABSTRACTS

DAY 01

Ravi Vijay Kumar
India

Saliva as a diagnostic tools

Saliva as a diagnosti1c fluid offers distinctive advantages over serum because it can be collected non-invasively by individuals with modest training. Furthermore, saliva may provide a cost-effective approach for the screening of large populations. Whole saliva may be used for diagnosis of systemic diseases, because it contains serum constituents. This review explains the diagnostic application of saliva for hereditary disorders, autoimmune diseases, malignant and infectious diseases, and endocrine disorders, as well as in the assessment of therapeutic levels of drugs and the monitoring of illicit drug use, and also for forensic evidence and others. In future we are likely to see the increased utilization of saliva as a diagnostic fluid. As we enter the era of genomic medicine, sialo chemistry will play an increasingly important role in the early detection, the monitoring and progression of the systemic and oral diseases.

Conclusion: Saliva May Soon Replace Blood for Diagnosis.

Biography

My self Dr. Ravi Vijay Kumar from INDIA I completed my bachelor's degree from Lalit Narayan Mithila university Darbhanga Bihar (Sarjug dental collage and hospital Darbhanga). I go through many journals text books for this presentation.

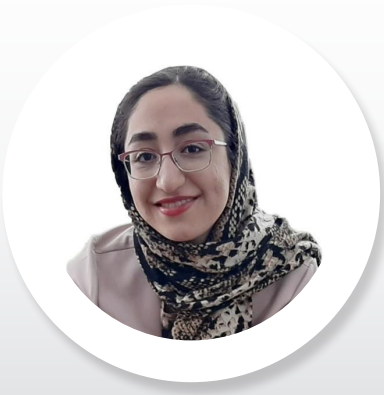
Apoorva Patel
MDS – Conservative Dentistry and Endodontics Government Dental College and Hospital, India

The pulpal response to dental procedures

"For every action, there is an equal and opposite reaction." This holds true for the routinely performed dental procedures as well. The preservation of a healthy vital pulp during operative procedures and successful management in cases of the disease are important challenges for a dentist. The pulp is an organ with remarkable reparative abilities, and the pulpal response varies with the extent and type of stimuli as well as the innate characteristics of the dental pulp and overlying dentin. This response may vary from inflammatory and immune reactions to degenerative changes. Dental procedures like tooth preparation, periodontal and orthodontic procedures, the use of local anesthetics, lasers, and vital bleaching agents, all affect the dental pulp to a certain extent. Also, the use of various dental materials can elicit a distinct pulpal response; depending on the cytotoxic nature, acidity, etc. The clinical practice of dentistry relies on the inherent capacity of the dental pulp to cope with many of the injurious challenges during dental procedures. A better understanding of pulpal reactions to dental procedures would help to prevent the unwarranted insult to the pulp and may reverse the disease process and return the dental pulp to its original form and function.

Biography

Apoorva Patel has completed her BDS and MDS (Conservative Dentistry and Endodontics) from Government Dental College and Hospital, Mumbai. She is a Senior Lecturer in the Department of Dentistry (Dayanand Sagar University). She has published many papers in reputed journals and actively involved in Biomedical Innovations Research.



Marziye Rezaei
Tehran University Of Medical Sciences,
Tehran, Iran

Evaluation of oral health status in multiple sclerosis patients

Background: Recent trends in the increasing incidence rate of MS have led to need attention to oral health status. Oral health plays an important role in overall peoples' health. The purpose of this paper is assessment of oral and dental hygiene indexes in MS patients and compare it with a healthy control group.

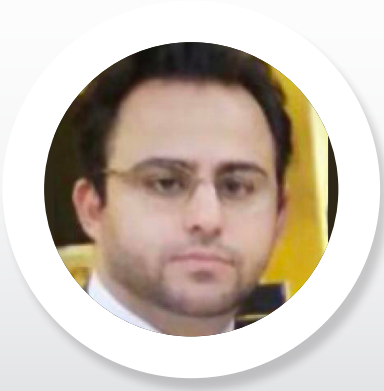
Material & Methods: Forty patients that fulfilled the MS McDonald criteria were enrolled in our study and forty healthy volunteers were recruited into the control group. Dental and periodontal examination were carried out in order to evaluate of the decayed, missing and filled teeth (DMFT) index, the assessment of community periodontal index of treatment needs (CPITN) index and determination of tooth wear status and oral health status. Statistical analysis was done using SPSS statistical package (version 22, IBM).

Results: Mean age, educational level and tooth brushing was not statistically different between MS patients and control group. DMFT index in MS patients was significantly higher than control group (p=0.011). There was statistically significant difference in CPITN index between cases and control group (p=0.042). There was no statistically significant difference between case and control group in tooth wear index of maxillary teeth (p=0.28) and mandibular teeth (p=0.475).

Conclusion: This finding, suggests that MS patients need more attention to dental and oral health. Considering increase in prevalence of multiple sclerosis in Iran in recent years, planning a protocol for oral hygiene instruction is necessary. In this regard, coordination between neurologists and oral medicine specialists may improve comprehensive care.

Biography

Marziye Rezaei is a 6th year dental student in Tehran University Of Medical Sciences.She is in charge of Dental College Mentorship in Tehran University Of Medical Sciences about educational ,mental or research matters.Besides,she had some oral presentations like Usern Miniature Talk 2020,Student conference in Northdent Congress and Poster presentation about educational ideas for dental students in Tehran.



Amirhosein Bani Shahabadi
Faculty Tabriz University of Medical Sciences, Iran.

Nanofibrous asymmetric collagen/curcumin membrane containing aspirin loaded plga nanoparticles for guided bone regeneration

Bone defects are considered among the common devastating problems worldwide. Although bone grafting has been applied in the clinic to solve this issue, it has been reported that the rapid migration of fibroblasts to the defect or fracture site can shape a fibrous capsule which prohibits the efficient growth of blood vessels and osteoblasts into the graft tissue and finally result in bone nonunion. New developed guided bone regeneration (GBR) methods which effectively halts bone destroying and improves new bone generation hold promise in this context. Creation and maintenance of a secluded space via a barrier membrane is a fundamental rule in GBR which inhibits invasion of the rapidly growing fibrous capsule and other soft tissues and thus facilitated the inhabitance of host bone-originated osteoblasts in defect niche. High biocompatibility, satisfactory degradation and mechanical specifications in order to produce proper barrier functionalities, space maintenance and clinical handling should be the essential properties of used membranes. Enhancing these properties and the ability to complete new bone regeneration via membrane materials is an important research field in bone regeneration.

Nanotechnology is the use of a substance on an atomic, molecular and supra-molecular scale and nano- medicine deals with the medical implementation of nanotechnology. Nanotechnology-based production of asymmetric membranes is considered to be a perfect bone healing which provides a top layer that acts as an inhibitory barrier against pathogen invasion and physical damages and also an inner layer which allows bone resorption and maintains the niche that is crucial for bone regeneration.

The aim of the current study was to design an asymmetric membrane including aspirin-loaded PLGA nano- particles and curcumin nanofibers using nanotechnology methods for guided bone regeneration purposes.

Material and Methods (Patient report or search method or method of evaluation):

The membrane was prepared using electrospinning technique and then was physic chemically characterized by the conventional methods. The release profile of aspirin from the prepared membrane was also measured by ultraviolet spectrophotometry. Also, the antibacterial activities of the membrane was evaluated. We also assessed the in vitro effects of the prepared membrane on the biocompatibility and osteogenic differentiation of dental pulp stem cells (DPSCs), and evaluated in vivo bone regeneration using the prepared membrane in the defects created in both sides of the dog's jaw by histology.

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The institutional ethics committee of the Tabriz University of Medical Sciences agreed with both theses and all experimentations were done based on the related guidelines and rules. The code of ethics for preparation and physicochemical assessments was IR.TBZMED.REC.1397.317. For cellular and in vivo investigations the code of ethics was IR.TBZMED.VCR.REC.1399.164.

Findings:
The results from the characterization specified that the membrane was successfully prepared with monodispersed nanosized fibers, uniform network shaped morphology, negative surface charge and sustained release platform for aspirin. The membrane also showed antimicrobial effects against all tested bacteria. The presence of curcumin and aspirin in the asymmetric membrane enhanced osteogenic potential at both transcriptional and translational levels. The results of the animal test showed that the test area was completely filled with new bone after just 28 days, while the commercial membrane area remained empty. There was also a soft tissue layer above the new bone area in the test side.

Conclusion:
We suggested that the prepared membrane in this work could be used as a GBR membrane to keep soft tissue from occupying bone defects in GBR surgeries. Besides, the surgeries can be benefited from antibacterial activities and bone healing effects of this novel GBR membrane while, simultaneously, promoting bone regeneration.

Key words:
Guided bone regeneration, Membrane, Nanotechnology.

Biography
Dr.Amirhosein Bani Shahabadi D.D.S, O.M.F.S has completed his D.D.S. at the age of 28 years from Qazvin University of medical science ,Iran and post graduated studies of oral and maxillofacial surgery from Tabriz University School of Medical science ,Iran. He is the CEO of Amlak Teb Avizhe, an inovative virtual surgery company and also he is an inventor that has a patent in Iran . He has published more than 9 papers in reputed journals.

Current state of digital dentistry: digital dentures and their properties

Rata Rokhshad
Dental student, Faculty of Dentistry, Tehran medical sciences, Islamic Azad University, Tehran, Iran

Digital technologies offer the opportunity to integrate facial scans into the design of digital dentures and provide a 3D preview and simulation of the tooth arrangement for treatment planning. The conventional fabrication methods are, error-prone, time-consuming, complex, and expensive procedures. Removable partial dentures(RPD) and Complete dentures(CD) fabricated by computer-aided design and computer-aided manufacturing (CAD-CAM) techniques have become popular. Therefore, we reviewed the treatment outcomes of concepts used for implant-supported overdentures, RPDs and CDs.

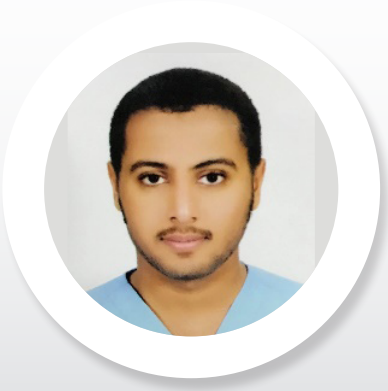
Method and Materials: An effective search of the literature was done, mainly through pubmed and Google Scholar with("CAD-CAM" and "dentures" or "Digital" or "RPD") as keywords. We found 42 published studies from 2003 to 2020. According to the research methods 21 articles were chosen.

Results: Digital dentures can be fabricated digital or combined analog-digital while using intraoral scanners or extraoral scanners. Milling and rapid prototyping (3D printing), have been widely used in the fabrication of dentures. They have been reported to have clinically acceptable results. Digital dentures were evaluated by their accuracy, patients satisfaction, outcomes and their procedures. CAD/CAM dentures have several advantages such as reducing clinical chair time and the number of visits, digital archiving, significantly higher retention, and more favorable clinical and patient-centered, less denture tooth movement, increased toughness, ideal flexural strength, and higher elastic modulus. CAD/CAM dentures showed at least comparable accuracy. However, disadvantages such as high cost, software errors, and lack of jaw relations in functional state, are still the problem.

Conclusions: CAD/CAM dentures had better clinical outcomes than conventional dentures. Although, there are some limitations in the manufacturing procedures. Results of studies suggest there is a great potential for further investigations.
Keywords: CAD/CAM complete dentures; Digital complete dentures; removable partial denture.

Biography

Rata Rokhshad is a 6th year dental student at Tehran medical sciences, Islamic Azad University, Tehran, Iran. She has been working in a digital dental office and a digital dental lab. She has published papers in dental journals. she has presented several poster presentation and oral lectures in different dental congress.



Hamad Sulaiman Alduraihim
Prince Sattam Bin Abdul Aziz University,
Alkharj, KSA

Assessment of saudi parent's awareness towards space maintainers at alkharj city: a cross sectional stud

Premature extraction or loss of a tooth due in primary dentition may lead to malocclusion in permanent dentition. Space maintainers are very important to children in mixed and primary dentition for preventing problems of malocclusion. The utilization of space maintainers depends on parental knowledge and awareness about space maintainers. Aims and Objectives: To assess the of Saudi parent's awareness toward space maintainers in Alkharj city. Material and Methods: A descriptive cross-sectional questionnaire-based study was planned among Saudi parents who visited the College of Dentistry, Prince Sattam Bin Abdulaziz University. Questions related to space maintainers awareness, use, source of information, and utilization of space maintainers were asked. Results: Around 312 (82.1%) parents were not aware of space maintainers and did not receive any information about the same. About 166 (43.7%) parents did not have any personal experience of a child's missing deciduous teeth. Only 115 (30.26%) respondents received some information about space maintainers. The majority of parents 298 (78.4%) were unaware whether space maintainers aid in the eruption of permanent teeth. Similarly, 73.7% did not know when to use space maintainers. Conclusions: Knowledge of space maintainers among Saudi parents is very less. Dental professionals hence need to create awareness of interceptive orthodontics rather than curative approaches, to achieve better oral health outcomes.

Biography

Hamad Sulaiman Alduraihim has completed his Bachelors degree at the age of 26 years from College of Dentistry at Prince Sattam Bin Abdul Aziz University. Now he is working as General dentist in Riyadh.

Susana Falardo Ramos
DDS, MSc, PhD
International Certificant ABDSM, Qualified Dentist EADSM

"The role of myofunctional therapy on pediatric osa "

Snoring and OSAHS in children have attracted the attention of health professionals in general and of in particular, multidisciplinary medical team thanks to the innumerable associated comorbidities, as well as socio-economic and behavioral problems. SAHOS is a chronic disease with a high degree of morbidity and mortality, and in children it presents a high cognitive behavioral commitment, involving school performance and behavior.

It is consensual for the AADSM, EADSM and AAP that the diagnosis of snoring and SAHOS is made based on a clinical history and confirmed through PSG-Polysomnography. The cephalometric analysis has been considered as an important method in the diagnosis, providing craniofacial characteristics and serving as a predictive orientation for growth. These respiratory sleep disorders are characterized by varying degrees of decreased space of the vas, caused by anatomical and functional factors.

It is now known from published studies that respiratory function is widely implicated in the existence or development of these pathologies, which condition the growth and positioning of the structures of the facial skeleton and cervical posture.

The proposed treatment passes through the intervention of a multidisciplinary team in which the Pediatrician, Otolaryngologist, Orthodontist, specialists in Sleep Medicine and Speech Therapist, play an important role in the diagnosis, treatment and reeducation of facial gold muscle. The latter, in recent years assumes an important performance in the myofunctional evaluation of the facial muscle structures and upper areas, as well as, in exercise and muscle reeducation, for the restoration of respiratory functions, chewing and swallowing, greatly altered in these pathologies. Myofunctional therapy today occupies an important part as a coadjuvant treatment with Preventive and Interceptive Orthodontics, as well as in the balance and muscular stability, reducing according to the academies, AADSM, EADSM and AAP the AHI.

Biography

Susana Falardo Ramos, is Doctor of Dentistry from the Egas Moniz Superior Institute, Lisbon-Portugal, as a Master Science degree on Myofunctional Therapy from the Superior Institute of Psychological Studies Madrid-Spain and completed her PhD from Complutense University of Madrid- Spain. She has collaborate as a Professor on a research and an academic level in the Prevention and Public Health Program at the School of Dentistry at the Complutense University of Madrid-Spain, since 2015. In 2017 she became a Qualified Dentist by the Europeaan Academy of Dental Sleep medicine and in 2020 achieved the International Certificant by the American Board of Dental Sleep Medicine. She is a Board Member and Vice-President of the EADSM and a Scientific Committee member of the AADSM.

Dr. Arpit Sikri
Associate Professor Bhojia Dental College & Hospital, India

The ABC of Basal Implantology

Dental implants have always been a preferred choice as far as the prosthetic rehabilitation is concerned. Success of the prosthodontic treatment relies on the proclivity of dental implants in comparison to other prosthetic rehabilitation modalities i.e. removable and fixed. Although, the endosseous implants have always been a conventional treatment modality, the concept of BIG B i.e. Basal Implants in Dentistry is not a new one. They have been termed in a way keeping in view the length of the implant since they have greater length as compared to the crestal implants. Basal implants have always been in controversy with the conventional crestal implants keeping in view the active evidence based practices going on day-to-day basis.

In conventional implantology (Implants are referred to as crestal-type implants since they are inserted into the jaw bone coming from the crestal alveoli and whose main load-transmitting surfaces are vertical. The BIG B or Basal implantology has been given so many names in the past. It is also known as bicortical implantology, cortical implantology, bicortical, multicortical, corticobasal and very recently BIPS (Bone Implant Prosthetic System) is a modern implantology system which involves lateral or axial placement of the dental implants into the basal bone. The basal bone i.e. the framework of the human body provides excellent quality cortical bone as well as resistance to resorption has been the bone of choice while engaging the implants.

Biography

Dr. Arpit Sikri [BDS (Gold Medallist), MDS (Prosthodontics), PGDHM, DWCOI] is currently working as Associate Professor & Post Graduate Teacher in the Department of Prosthodontics, Bhojia Dental College & Hospital, Baddi, Himachal Pradesh, India. He had earlier worked as Senior Resident in the most prestigious dental institute of the country i.e. Maulana Azad Institute of Dental Sciences, New Delhi, India. He had also worked as Senior Lecturer in Santosh Dental College, Santosh Deemed to be University, Ghaziabad (Delhi NCR) & Senior Lecturer in Sudha Rustagi College of Dental Sciences & Research, Faridabad, Haryana, India. He is the youngest dental surgeon of India to have completed his Post Graduate Diploma in Hospital Management from National Institute of Health and Family Welfare (NIHFW, New Delhi) and that too with distinction. He has also been conferred with Diplomate Fellowship in the field of implantology by World Congress for Oral Implantology (WCOI), Tokyo, Japan. Throughout his academic career, he had been awarded with gold medals being the Topper of the University, back to back. He has authored a book on “Oral Pathology” under Scientific Medtech publishers. He has to his credit around 28 books under Lambert Academic Publishing (LAP) and more than 100 national as well as international publications in various reputed journals. He is the Editor of Webmed Central, Associate Editor of Current Dental Research Journal and Assistant Editor of Asia Pacific Dental Journal & I-Dentistry journal. He is on the panel of various national and international journals as an editorial board member. Apart from this, he is also an active reviewer for various journals. He is actively associated with various associations namely IPS, IDA, IDRR, AHA, etc. He has been recently

Dr. Arpit Sikri
Associate Professor Bhojia Dental College & Hospital, India

appointed as “General Secretary” of Oral Maxillofacial Implantology Council of India (OMICI) by DenTrenz Careers. He has presented keynote guest lectures and faculty presentations in various national & international conferences. He has been recently appointed as the youngest plenary speaker representing India in the European Conference on Dental Health hosted by Conference Series LLC Ltd on 29th July 2021. He also presented paper as well as poster presentations in various conferences, many of which were highly appreciated and awarded. He is also known for his organization skills since he has been actively associated as organizing committee member for various conferences. Moreover, he is the youngest dental surgeon of the World to have been appointed as Chairman, Organizing Committee of the DenTrenz 3 in 1 International Virtual Dental Conference 2020. He is the Council Member of Gergson Lehrmann Group (GLG). He had been the President of NDDSF (dental society) from Punjab State. He has also contributed in various books like Textbook of Conservative & Restorative Dentistry, Textbook of Endodontics, Indirect Restorations, Target MDS MCQ’s, Dental Matrix, Brahmastra, AIIMS 25 etc. He has been also conferred with many awards namely IDA Profile of the Month 2011, Budding Dentist Award 2010, Dental Youth Icon 2009, Student Ambassador and Mentor by the publishing group “Elsevier” and “The Best Post Graduate Student in Prosthodontics in India” in 2016. He has been recently awarded as “The Most Dynamic Dentist of the year 2021” during the Next Den Gen Awards 2021 where he was also appointed as the Guest of Honour and esteemed jury member. Earlier, he was awarded “Doctor's Excellency Icon Award 2020” for excellent work in the field of dentistry by Geniuses World Records on the occasion of National Doctor’s Day i.e. 1st July 2020 & Global Outreach Healthcare Award 2020 under the category “Associate Editor of the Year” for exemplary work in the field of research by Global Outreach Medical & Health Association (GOMHA). He has recently been conferred with the Appreciation Award for commitment and dedication to the field of dentistry on the occasion of International Dentist’s Day i.e. 6th March 2021 by team CynoDent (Global Healthcare for all). He was also awarded and honoured by the then Chief Minister of Punjab (Sh. Prakash Singh Badal) for securing highest marks during BDS 1st professional university examinations. He was also awarded with IDA Colgate scholarships and RN Kukar merit award throughout his academic career. Apart from the academics, he is actively associated with sports and cultural activities also. He had been a national level player of Table Tennis and won many awards for the same. He has also won medals for various sports events held in conferences, intra-college as well as inter-college level.