31st International Webinar on

Dentistry

January 06, 2022 | Webinar

Scientific Tracks & Abstracts

35 YEARS OF EXCELLENCE IN MEDICAL PUBLISHING

31st International Webinar on
DENTISTRY

January 06, 2022 | Webinar

The prosthetic management of a case of epulis fissuratum by a novel technique

Rabia Mekayssi
Mohammed V University, Morocco

Background: The management of the epulis involves the elimination of causal factors, excision of fibrous tissue excess accompanied by an appropriate prosthetic rehabilitation. The confection of interim prosthesis or the rectification of old prosthesis for the setting up of a tissue conditioner is necessary to improve the healing and prevent the decrease of the vestibule depth after the surgical exeresis. Throughout this presentation we are going to present a new technique for the correction of old prostheses poorly adapted for the management of a case of the epulis fissuratum.

Keywords: Epulis fissuratum; Interim prosthesis; Conditioning tissue; Complete denture

Biography

Mekayssi rabia specialist dentist of prosthetic dentistry and affiliated with Mohammed V University in Morocco.

mekayssirabia@gmail.com

31st International Webinar on
DENTISTRY
January 06, 2022 | Webinar

Facing dysbiosis in periodontal diseases: An overview on probiotic therapy

Maurizio Pascadopoli, Simone Gallo and **Andrea Scribante**
University of Pavia, Italy

Gingivitis consists of a reversible inflammation of the soft tissues surrounding the tooth which may evolve towards periodontitis, a destructive and irreversible form. The most relevant etiological factor for gingivitis is represented by plaque accumulation.

The first periodontal treatment in case of gingival inflammation consists of the mechanical removal of accumulated plaque/calculus through scaling, root planning, and polishing, along with specific oral hygiene instructions for the domiciliary maintenance of the oral health. Additionally, chemical antimicrobial substances may also be used to decrease the bacterial load. Specifically, chlorhexidine is the substance most used for this purpose, despite side effects like tooth discoloration, oral mucosal erosion, and taste alteration can occur during its use.

Researchers are now focusing on new alternatives for the antimicrobial treatment of periodontitis and the latest innovation is represented by probiotics, defined as "live microorganisms which when administered in adequate amounts confer a health benefit on the host", according to the Food and Agriculture Organization (FAO) and the World Health Organization (WHO).

Probiotics, especially Lactobacillus and Bifidobacterium, are generally used to promote gastrointestinal health, but, in recent years, it has also been suggested that they could positively influence the status of the oral health, contrasting bacteria responsible for caries, periodontal disease, and halitosis.

Several mechanisms have been discussed to explain their beneficial action, e.g., the exclusion and competition with pathogens for nutrients and epithelial cell adhesion, the production of antimicrobial substances against pathogenetic bacteria, an immunomodulatory action, and an enhancement of the mucosal barrier function.

Several studies have been conducted to evaluate the effect of probiotics on oral health, anyway further research is expected to fully understand the potentiality of probiotics-based agents for the management of different forms of periodontal disease.

Biography

Maurizio Pascadopoli Doctor of Dental Surgery currently attending the post-graduate school of orthodontics of the University of Pavia, Italy. His research activities focus on orthodontics, professional and domiciliary management of periodontal disease, and ozone therapy for periodontal patients.

maurizio.pascadopoli01@universitadipavia.it

31st International Webinar on
DENTISTRY
January 06, 2022 | Webinar

Porosity pattern of 3D chitosan/bioactive glass tissue engineering scaffolds prepared for bone regeneration

Hoda G H Hammad
Misr university for science and technology, Egypt

Aim: The study was conducted to investigate the obtained external and internal porosity and the pore-interconnectivity of specific fabricated bioactive composite tissue engineering scaffolds for bone regeneration in dental applications.

Materials and Methods: In this study, the bioactive glass [M] was elaborated as a quaternary system to be incorporated into the chitosan [C] scaffold preparation on a magnetic stirrer to provide bioactivity and better strength properties for the attempted composite scaffolds [C/ M] of variable compositions. The homogenous chitosan/bioactive glass mix was poured into tailor-made cylindrical molds [10cm×10cm]; a freeze-dryer program was used for the creation of uniform and interconnected macropores for all prepared chitosan-based scaffolds. The morphology of fabricated chitosan [C] and chitosan-bioactive glass [C/ M] composite scaffolds was studied by a scanning electron microscope [SEM] and a mercury porosimeter. In addition, the in-vitro biodegradation rate of all elaborated scaffolds was reported after immersing the prepared scaffolds in a simulated body fluid [SBF] solution. Furthermore, for every prepared scaffold composition, characterization was performed for phase identification, microstructure, porosity, bioactivity, and mechanical properties using an X-ray diffraction analysis [XRD], an X-ray Fourier transfer infrared spectroscopy [FTIR], a mercury porosimetry, a scanning electron microscopy [SEM] coupled to an energy-dispersive X-ray spectrometry [EDS] and a universal testing machine, respectively.

Results: All the prepared porous chitosan-based composite materials showed pore sizes suitable for osteoblasts seeding, with relatively larger pore sizes for the C scaffolds.

Conclusion: The smart blending of the prepared bioactive glass [M] with the chitosan matrix offered some advantages, such as the formation of an apatite layer for cell adhesion upon the scaffold surfaces, the reasonable decrease in scaffold pore size, and the relative increase in compressive strength that were enhanced by the incorporation of [M]. Therefore, the morphology, microstructure, and mechanical behavior of the elaborated stress loaded bio composite tissue engineering scaffolds seem highly dependent on their critical contented bioactive glass.

Biography

Hoda Gaafar Hammad completed her Bachelor of Oral Medicine and Dental Surgery at Cairo University, Egypt during 1990 to 1994. She completed her PhD in Restorative Dentistry at Cairo University. Currently working as Assistant Professor of Operative Dentistry and Head of Division of Dental Biomaterials, BMC (Batterjee Medical College), Dental Program, Jeddah, Saudi Arabia (KSA) since 15 October 2018 to till date.

dr.hodahammad@gmail.com

31st International Webinar on
DENTISTRY

January 06, 2022 | Webinar

The application of pendulum as a space regainer in orthodontic treatment

Himawan Halim
Trisakti University, Indonesia

Background: The process of distalization in orthodontic treatment is often very difficult. The most common method is the use of cervical headgear. However, due to poor patient compliance, it leads to poor treatment outcomes. Treatment alternatives that require minimal compliance include jones jig, magnets and pendulum.

Objective: This study aimed to perform distalization of a maxillary molar on a bilateral Class II molar relationship patient with a crowded maxillary arch.

Case Report: A 10-year-old female with a Class II molar relationship, bilateral posterior crossbite, and nonerupted upper canines was treated with a rapid palatal expander (RPE), pendulum appliance, and fixed appliance. The crowding in the maxillary arch and spacing in the mandibular arch were eliminated, and transverse discrepancies were corrected.

Conclusion: Pendulum appliance is very effective in creating spaces for the eruption of canines and ectopic premolars. Pendulum appliances have been introduced for a long time and have proven successful for molar distalization and space regainer and require minimal patient cooperation. Like other distalization appliances, distal tipping of the molars and mesial movement of the premolars could be observed. could be observed.

Biography

Himawan Halim done his Bachelor of Science in Chemistry from UCLA in 1981, then DMD from Washington Univ School of Dental Medicine in 1986. MSc in Orthodontic from Washington Univ School of Dental Medicine in St Louis in 1988. In 2005, PhD from Univ of Indonesia. On Job Trainee at Department of Orthodontic, Otago University and Middle Moore Hospital, Auckland, New Zealand. Retired Navy Orthodontists. Presently, faculty at Orthodontic Department Univ of Trisakti and private practice. Visiting Adjuct Faculty at Univ of Alabama , AT Still Univ and European University College, Dubai. Board member of world orthodontic implant association, Japanese orthodontic journal, and past executive committee members of world federation of orthodontic.

himawan@trisakti.ac.id

31st International Webinar on
DENTISTRY
January 06, 2022 | Webinar

Association between occupational exposure to tobacco dust and absolute telomere length: A cross sectional study on female beedi workers

Yamini Kanipakam
Shri Sathya Sai Medical College and Research Institute, India

Aim and objective: The main aim of the study was to assess the absolute telomere length (aTL) in female beedi workers using real-time polymerase chain reaction (RT-PCR) and to compare the aTL with female non-beedi workers.

Materials and methods: A cross-sectional study was carried out among age-matched 20 female non-beedi workers and 20 female beedi workers were enrolled for molecular analysis. The workers were in the age group of 20–35 years and were workers exposed from 1 to 3 years. Saliva samples were collected from workers and control subjects for molecular analysis. The genomic DNA was extracted from saliva and aTL was estimated using real-time polymerase chain reaction.

Results: The mean and standard deviation of average absolute TL/each chromosome end for the control group and study group were 0.75 ± 0.94 and 1.45 ± 2.76 kb. There was no statistically significant difference between the control group and the study group ($Z = -0.112$, $p = 0.911$).

Conclusion: The present study revealed that there is no significant association in average absolute TL in early exposed female beedi workers when compared with female non-beedi workers. Furthermore, horizons are to be expanded for the population to prevent any occupational health hazards.

Clinical significance: Telomere length is a biological clock that decides the lifetime of a cell and organism. Determination of TL is a better tool to detect genomic damage. Unburnt tobacco has been related to several health issues in beedi employees. The importance is to predict the genetic liability by estimating the aTL in beedi workers at early exposure to tobacco dust (TD).

Biography

Yamini Kanipakam's passion in molecular basis of cancer led her to choose the thesis topic in molecular genetics during her postgraduate studies. Her thesis was the first cross-sectional study carried out on beedi workers to determine absolute telomere length by using real-time PCR. The study found no significant association between early tobacco dust exposure and absolute Telomere length. She has published papers in national and international journals. She received certificate of Excellence in Reviewing from Journal of Pharmaceutical Research International. Currently, she is working for the Rivista Medicine journal as an Associate Editor.

dr.mini2711@gmail.com

31st International Webinar on
DENTISTRY

January 06, 2022 | Webinar

Role of adjunct use of omega 3 fatty acids in periodontal therapy of periodontitis. A systematic review and meta-analysis

Debopriya Chatterjee
Rajasthan University for Health Sciences, India

Background: Host modulation therapy has emerged as a new concept for the treatment of periodontal disease. Recently, a lot of research is being done in product containing docosahexaenoic acid (DHA) and eicosapentanoic acid (EPA). Omega-3 PUFA have therapeutic, anti-inflammatory, and protective properties. This systematic review analysed the adjunctive use of omega-3 fatty acids in periodontal therapy of periodontitis patients.

Methods: PICO question (patient, intervention, comparison, and outcome) was formed. Keywords were generated and were fed in databases. The databases were PubMed, Cochrane library and LIVIVO. Studies selected are randomized clinical trial, clinical studies, and longitudinal studies. Meta -analysis were performed for pocket depth (PD), clinical attachment level (CAL), gingival index (GI) and plaque Index (PI). Risk of bias was also assessed.

Results: On analysis of all the 8 studies at 3 months showed significant effect of omega -3 fatty acid on clinical attachment level (CAL), pocket depth (PD). There was significant effect of omega-3 fatty acids in 4 studies at 6 months.

Conclusion: Within the limitation of the review, omega- 3 polyunsaturated fatty acids seem to have a positive effect on periodontal healing following periodontal therapy. Chronic periodontitis patient should be counselled to incorporate omega -3 fatty acid in their diet along with standard periodontal therapy.

Biography

Debopriya Chatterjee graduated from Government Dental College, Rajasthan University of Health Sciences in Jaipur. Completed her M.D.S Periodontics in M.R Ambedkar Dental College, Bangalore. Currently working as senior demonstrator in department of periodontics, Government Dental College (Rajasthan University of Health Sciences).

banerjee.debo@gmail.com

PULSUS
WWW.PULSUSCONFERENCE.COM
15 YEARS IN ASSESSING THE IMPACT OF HEALTHCARE RESEARCH

31st International Webinar on
DENTISTRY

January 06, 2022 | Webinar

Correlation of surgical site infection after appendicectomy with per-operative morphological appearance of appendix

Irfan Haider AbdiIndia
Liaquat University of Medical & Health Sciences, Pakistan

Background: Acute appendicitis is the most common cause of emergency abdominal surgery worldwide. Postoperatively, surgical site infection (SSI) occurs in 3% to 60% of appendicectomized patients, depending on pathological state of appendix. SSI is a devastating complication from biologic and economic point of view and has enormous impact on patient's quality of life.

Aim/Objectives: To determine the frequency of surgical site infection after appendicectomy in patients presenting as acute appendicitis and correlate it with per-operative morphological appearance of appendix.

Methodology: This cross-sectional study was carried out on 200 patients for the period of one year from March 2015 to February 2016 in the department of general surgery, Liaquat University of Medical and Health Sciences Jamshoro. All male and female patients above age of 12 years with clinical diagnosis of acute appendicitis or localized peritonitis due to perforated appendix undergoing appendectomy by grid iron incision and whose skin closed primarily by interrupted silk 2/0 stitches were included in the study. Operative findings were recorded, and inflammation of appendix was graded into four categories. Postoperatively patients were followed for period of 30 days to check the development of SSI.

Results: Out of 200 patients, 42 suffered from SSI (21%). Based on per-operative morphological appearance of appendix, uncomplicated appendicitis was significantly high 135(67.5%) than complicated appendicitis 65(32.5%). SSI developed in 12(28.5%) cased of uncomplicated and 30(71.5%) cases of complicated appendicitis.

Conclusion: It was not possible to establish a relationship between SSI and per-operative morphological appearance of appendix. Frequency of SSI reported here (21%) is comparable with literature. We recommended that avoiding delay in diagnosis, use of peri-operative antibiotics, sound surgical technique to avoid wound contamination and continuing surveillance is necessary to further reduce SSI rates after open appendicectomy.

Biography

Irfan Haider AbdiIndia is specialized in general surgery and currently working at Liaquat University of Medical & Health Sciences, Sindh Pakistan.

farooq346@gmail.com

31st International Webinar on
DENTISTRY

January 06, 2022 | Webinar

Short Implants… understanding the Biomechanics!

Reshu Madan Sanan
SGT University, India

In situations where extensive surgical procedures are warranted short implants have worked as a savior defying all biomechanics of crown-to-implant ratio. The crown-root ratio guidelines used to establish a prognosis for teeth serving as abutments are commonly applied to dental implant-supported restoration or potential implant site. These guidelines are generally empirical and therefore lack scientific validation. Using the 3D finite element method, this paper aims to compare the stress distribution on short implants with reverse or increased crown to implant ratios.

Biography

Reshu Sanan is an experienced Prosthodontist with a demonstrated history of working in the hospital & health care industry. Skilled in Geriatric Dentistry, Implantology and Advanced Dental Care. Strong healthcare services professional graduated from Swami Vivekanand Subharti University. Did post graduation from Pandit P D Sharma University of Health Sciences. Has advanced training in All-on-4 treatment planning and execution. Has advanced training in diagnosing and managing TMJ disorders. Expert in public speaking and managing interpersonal relations.

reshu.sanan@sgtuniversity.org

31st International Webinar on
DENTISTRY
January 06, 2022 | Webinar

Evaluation of surface analysis of Gutta Percha after disinfecting with sodium hypochlorite, silver nanoparticles and chitosan nanoparticles by atomic force microscopy: An *in vitro* study

Chavva Lakshmi Charan Reddy
Panineeya Institute of Dental Sciences and Research Centre, India

Aims & objectives: The purpose of this study is to evaluate the surface topography of gutta percha (GP) after disinfecting with Sodium hypochlorite (5.25%), Silver nanoparticles (70 µg/ml) and chitosan nanoparticles (1.5 mg/ml) by atomic force microscopy (AFM).

Materials and methods: Forty (40) Gutta percha cones were taken in this *in vitro* study. These samples were divided into four different groups such as: Group I – control group (untreated GP Points), Group II, III, and IV were treated with 5.25% Sodium hypochlorite (NaOCl), 70 µg/ml silver nanoparticles (AgNPs) and 1.5 mg/ml Chitosan nanoparticles (ChNPs) respectively. The surface topography analysis of the samples was performed using AFM.

Statistical analysis: Root mean square (RMS) and surface roughness parameters were used to compare the structure of GP points with contact mode imaging. These values were tested by IBM SPSS-20.0 version statistical software using one-way ANOVA and Post-hoc (Tukey HSD) tests. They were considered statistically significant when $P < 0.05$.

Results: The Root mean square (RMS) and surface roughness values are significantly higher for Sodium hypochlorite group (5.25% NaOCl) when compared with silver nanoparticles group (70 µg/ml AgNPs) and Chitosan nanoparticles group (1.5 mg/ml ChNPs).

Conclusion: This study has shown more surface topography deterioration of GP treated with NaOCl and lesser deterioration with AgNPs and ChNPs which affects postoperative prognosis.

Biography

Chavva Lakshmi Charan Reddy is highly motivated, skilful clinical professional with a passion for endodontic and aesthetic management of teeth. Completed the BDS (2012-2017) from Mamata dental college, Khammam, Telangana and MDS (2018-2021) from Panineeya dental college, Hyderabad, Telangana. Passed the MDS with distinction (University fourth). Won the best poster at 3rd APTS IACDE conference and best paper at IACDE 2nd zone PG convention. Had 12 publications in various national and international journals. His fields of interest for research is endodontic retreatment and surgical endodontics.

charan1288024@gmail.com

31st International Webinar on
DENTISTRY
January 06, 2022 | Webinar

Effect of Er: YAG laser irradiation and acidulated phosphate fluoride therapy on re-mineralization of white spot lesions

Malihe karrabi
Sabzevar University of Medical Sciences, Iran

Statement of the Problem: This study evaluated the effect of erbium-doped yttrium alumi-num garnet (Er: YAG) laser irradiation and application of acidulated phosphate fluoride (APF) gel (alone and in combination) on remineralization of artificial white spot lesions (WSLs).

Purpose: This study sought to assess and compare the effects of Er: YAG laser and APF gel on remineralization of WSLs.

Materials and Method: This in vitro, experimental study evaluated 90 buccal and lingual slabs of extracted human premolars. The specimens underwent pH cycling to induce WSLs. They were then randomly divided into 6 groups of caries-free positive control (c+), negative control with WSLs (ws), 1.23% APF gel applied on the enamel (F), Er: YAG laser irradiation (80 mJ, 10 Hz, and 8 J/cm2) of enamel (L), APF gel application followed by laser irradiation (FL), and laser irradiation followed by fluoride gel application (LF). The fluoride ion content of specimens was measured before and after the intervention using a potentiometer. Data were analyzed by ANOVA ($p< 0.05$).

Results: APF gel application before/after laser irradiation maximally increased the fluoride uptake by the enamel ($p= 0.000$). Application of APF gel in group F and laser irradiation in group L increased fluoride uptake by the enamel, compared with groups 1 and 2 ($p= 0.000$). Laser-treated (L) and APF-treated (F) groups had no significant difference in this respect ($p= 0.945$). Maximum fluoride concentration was noted in combined laser and fluoride groups (FL=3 32.07ppm and LF=341.27ppm) with no significant difference between the two ($p= 1.000$).

Conclusion: Er: YAG laser irradiation changes the chemical composition of enamel and probably promote its remineralization, especially when combined with APF gel application, which highlights its cariostatic potential.

Biography

Malihe karrabi is well experienced dental surgeon and specialized in restorative dentistry. She is working as a Assistant Professor in the department of oral and prosthodontics, school of medicine, Sabzevar University of Medical Sciences, Sabzevar, Iran.

malih.karrabi@gmail.com