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PROGRAMME

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CED-IADR/NOF
Oral Health Research Congress

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Messe Wien Congress Centre

Vienna/Austria

Promoting High-Quality Oral Health Research in Europe

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Scientific Programme
THURSDAY, September 21

Seq#: 10 **Thursday, 21 September 2017, 11:30 hr – 12:30 hr Presenter at Poster**
(Free Poster Viewing from 8:30 hr – 17:30 hr)
Poster Session, Poster Hall

Biocompatibility - Bioactivity

0077 **Evaluation of Allergic Properties of Dental Materials.**
D. DALESSANDRI*, L. LAFFRANCHI, G. VATRI, G. ISOLA, F. ZOTTI, R. ZOTTI, M. BINDI, I. TONNI, C. PAGANELLI
(University of Brescia, Gorle, Italy)

S0078 **Sublingual Administration of HEMA Enhances Antigen-Specific B Cell Responses to Co-Administered Ovalbumin and Streptococcus Mutans.**
A.K. ÖSTBERG*, S. ALIZADEHGHARIB, U. DAHLGREN
(Oral microbiology and Immunology, Institute of Odontology, Gothenburg, Sweden)

0081 **Removal Efficacy and Cytotoxicity of a Calcium Hydroxide Paste Using N-2-Methyl-Pyrrolidone as a Vehicle.**
H. JANG, J.-L. BAE, K.-S. MIN*
(Conservative Dentistry, Chonbuk National University School of Dentistry, Jeonju-si, Korea)

S0082 **Biological Features of Bioactive Materials for Root-End Filling.**
L. KQIKU*, M. ROGULJIC, V. RAJIĆ, K. HANSCHO , E. FROEHLICH, I. MILETIC
(University Clinic of Dental Medicine and Oral Health, Division of Prosthodontics, Restorative Dentistry, Periodontology and Implantology, University of Graz, Graz, Austria)

S0083 **Human Dental Pulp Cell Response to Experimental Tricalcium Silicate Cement.**
X. LI*, M. PEDANO, K. VAN LANDUYT, Z. CHEN, B. VAN MEERBEEK
(KU Leuven (University of Leuven), Department of Oral Health Sciences, BIOMAT & University Hospitals Leuven (UZ Leuven), Dentistry, Leuven, Belgium)

0084 **In Vitro Evaluation of Monomer Release From Fixed Retainers.**
F. JORDANA, C. PELOURDE, R. BATIONO, M.-J. BOILEAU, J. COLAT-PARROS*
(Dentistry Faculty, University of Bordeaux, Bordeaux, France)

S0085 **SOD1 and SOD2 May Compensate RNS in Aged Odontoblasts.**
G. RUSSO, H. ROGGENDORF*, F.-J. FABER, M. ROGGENDORF, J. NEUGEBAUER, Y. KORKMAZ
(Operative and Craniomaxillofacial Surgery, University of Cologne, Cologne, Germany)

S0086 **The Effect of Titaniumdioxide-Nanotubes on Flowable-Composite's Physical, Mechanical, Antibacterial Properties.**
I. USTUNKOL CEYHAN, N. ATTAR*
(Hacettepe University, Ankara, Turkey)

S0087 **Rhus coriaria L. Binding Capacity to Mineralized versus Demineralized Dentin.**
R. SESEOGULLARI-DIRIHAN*, D. PASHLEY, A. TEZVERGIL-MUTLUAY
(Department of Cariology and Restorative Dentistry, University of Turku, Turku, Finland)

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Flexural strength was measured in biaxial flexural strenght test for all groups.Datas were analyzed using one-way ANOVA and Kruskall Wallis follewed by Tukey HSD and Mann Whitmey U test (α=.05).
Results Corresponding to the XRD results; relative amount of the monoclinic phase content showed diversity among the groups due to aging. The lowest biaxial flexural strength mean was recorded in Supra.
Conclusions Hydrothermal aging of Y-TZP can cause significant transformation from tetragonal to monoclinic crystal structure, which results in a statistically significant decrease in the flexural strength of thin bars. Long term in vivo studies are insisted to evaluate whether the results presented are transmissible to the clinical situation.

0077

Evaluation of Allergic Properties of Dental Materials

D. Dalessandri[1], L. Laffranchi[1], G. M. Vatri[4], G. Isola[3], F. Zotti[1], R. Zotti[2], M. Bindi[2], I. Tonni[1], C. Paganelli[2]
[1]University of Brescia, Gorle (BG), Italy, [2]Dental School, University of Brescia, Brescia, Italy, [3]University of Turin, Messina, Italy, [4]Major Prodotti Dentari Spa, Moncalieri, Italy

Objectives Individual allergic responses are commonly tested by simple patch tests. Medical societies or health authorities release many recommended or basic hapten lists. One can make reference to: European baseline series (European Society for Contact Dermatitis and the EECDRG); USA baseline series recommended by American Contact Dermatitis Society.
Every substance used in dentistry with a potentially dangerous chemical composition is restricted under REACH that establishes procedures for collecting and assessing information on the properties and hazards of substances. Have been reported frequent events of allergens causing allergic contact dermatitis (ACD) in dental personnel, in patients and also in students who come into contact with potentially allergenic materials in their training course. The aim of our research is to provide a literature review about the surveillance of contact allergies in dentistry over possible allergic reactions of dental materials that contain chemicals.
Methods We have analyzed only reviews in the common databases (Pubmed/US NLMN Institutes of Health, The Cochrane Database, Google Scholar) using MeSH Terms allergic, allergies, dentistry haptens, surveillance, paired or in combination between them in the last 10 years.
Results We found 39 articles that reviewed possible allergic reactions to dental materials, 3 works considered all possible dental materials, 1 evaluated the health surveillance needed to prevent the spread of allergenic events compared to commonly haptens used in the dental field; however it was done only in relation to patient exposure and does not consider the exposure of the operators and/or students.
Conclusions Due to the rise in number of patients with allergies from different materials, dentists should have knowledge about documented allergies to known materials and thus avoid such allergic manifestations in the dental clinic; also dermatologists need to be aware of the newer allergenic materials used in dentistry in order to correctly manage skin diseases in this high-risk group.

0078

Sublingual Administration of HEMA Enhances Antigen-Specific B cell Responses to co-Administered Ovalbumin and *Streptococcus Mutans*

A. Östberg[1], S. Alizadehgharib[2], U. Dahlgren[3]
[1]Oral microbiology and immunology, Institution of Odontology, Gothenburg, Sweden, [2]Oral microbiology and immunology, Odontology, Gothenburg, Sweden, [3]Oral microbiology and Immunology, Odontology, Gothenburg, Sweden

Objectives The wide use of acrylic based resins in a variety of modern dental procedures calls for a larger knowledge about the material caracteristics and safety, as it is has been reported that leakage of uncured monomers into the oral cavity can cause adverse health effects in dental patients post restorative treatment. The aim of this study was to investigate the ability of 2-hydroxyethyl methacrylate (HEMA) monomers to increase specific systemic immune responses towards bacterial and model antigens, i.e. the adjuvant capacity of HEMA, via the sublingual mucosa.
Methods Mice (n=8/group) were sublingually administered the common oral bacteria *Streptococcus mutans* (*S. mutans*) or *Lactobacilli murinus* (*L. murinus*) or the model antigen ovalbumin (OVA) together with HEMA at four weekly occasions. Mice administered *S. mutans, L. murinus, OVA* or HEMA only served as controls. One week after the last immunization, blood was drawn from the axillary plexus and the experiment was terminated. Serum was prepared and ELISA were performed in order to determine specific antibody responses.
Results Results show significantly increased anti OVA IgG activity in serum from mice immunized with OVA together