

<p>SIMULATION OF ADHESIVE DEBONDING AND ITS INFLUENCE IN STRESS DISTRIBUTION FOR INTRA-RADICULAR POST RESTORATIONS RICARDO ARMINI CALDAS; ATAIS BACCHI; RAFAEL LEONARDO XEDIEK CONSANI; MARCELO FERRAZ MESQUITA; ANTHEUNIS VERSLUIS; VALENTIM ADELINO RICARDO BARÃO PIRACICABA DENTAL SCHOOL - UNICAMP</p> <p>Aim : Elucidate the influence of debonding on stress distribution and maximum stresses for intra-radicular restorations.</p> <p>Method : Five intra-radicular restorations were analyzed by finite element analysis (FEA): MP = metallic cast post core; GP = glass fiber post core; PP = pre-fabricated metallic post core; RE = resin endocrowns; CE = single piece ceramic endocrown. Two cervical preparations were considered: no ferule (f0) and 2mm ferule (f1). The simulation was conducted in three steps: (1) intact bonds at all contacts; (2) bond failure between crown and tooth; (3) bond failure among tooth, post and crown interfaces. Contact friction and separation between interfaces was modeled where bond failure occurred. Mohr-coulomb stress ratios (σMC ratio) and fatigue safety factors (SF) for dentin structure were compared with published strength values, fatigue life, and fracture patterns of teeth with intra-radicular restorations.</p> <p>Results : The σMC ratio showed no differences among models at first step. The second step increased σMC ratio at the ferule compared to step 1. At the third step, the σMC ratio and SF for f0 models were highly influenced by post material. CE and RE models had the highest values for σMC ratio and lower SF. MP had the lowest σMC ratio and higher SF. The f1 models showed no relevant differences among them at the third step.</p> <p>Conclusion : FEA most closely predicted failure performance of intra-radicular posts when frictional contact was modeled. Results of analyses where all interfaces are assumed to be perfectly bonded should be considered with caution.</p>	<p>SINUS LIFT WITH NEWLY FORMING BONE AND INORGANIC BOVINE BONE: A PROOF OF CONCEPT WITH A CASE SERIES ISABELA RODRIGUES GONSALES; VITOR DE TOLEDO STUANI; ADRIANA CAMPOS PASSANEZI SANT'ANA; EDUARDO SANT'ANA; EULOIR PASSANEZI; IVÂNIA KOMATSU DA COSTA ARRUDA; BRUNA FIDENCIO RAHAL FERRAZ BAURU DENTAL SCHOOL - USP</p> <p>Aim : Recently, the use of mesenchymal stem cells has been proposed for maxillary sinus lift (MSL). Histological analysis of surgically created alveoli showed the presence of markers of mesenchymal stem cells from periodontal tissues. Thus, a graft technique that uses newly forming bone (NFB) is an interesting tool for bone defects due to its osteogenic potential. The objective of this case series is to demonstrate the effectiveness of NFB graft in the gain of bone tissue volume in MSL.</p> <p>Method : It was included two patients in need of oral rehabilitation at upper posterior region that looked for treatment at Bauru School of Dentistry, where it was observed the necessity of a previous MSL before implant placement. Sinuses were treated by NFB mixed to inorganic bovine bone in a proportion of 1:3. The NFB was collected from a surgical alveolus created 21 days before MSL. The bone tissue volume was evaluated at baseline and 6 months after surgery by computed tomography. After this period, implants were placed and a biopsies of hard tissue were obtained for histomorphometric analysis. The results showed an effective bone height gain by the comparison of the tomographic images. Histomorphometric analysis showed greater percentage of vital bone and lower percentage of remaining particles and connective tissue. Also, a reduced diameter of remaining particles was observed.</p> <p>Conclusion : These findings suggest that the use of NFB associated with inorganic bovine bone is effective for MSL, resulting in the formation of a great amount of vital bone and providing volumetric stability over time.</p>
<p>SPATIALIZATION OF THE USE OF DENTAL SERVICES IN A PAULISTA CITY CAROLINA MATTEUSSI LINO; MANOELITO FERREIRA SILVA JUNIOR; MARIA DA LUZ ROSÁRIO DE SOUSA; MARÍLIA JESUS BATISTA PIRACICABA DENTAL SCHOOL - UNICAMP</p> <p>Aim : The objective was to spatially distribute the type of dental service used by adults and the elderly in Piracicaba/SP.</p> <p>Method : The study is a transversal part of the first wave of the "Piracicaba/SP Adult Dental Health Cohort". Data were collected by two examiners, in domicile selected by probabilistic sampling, between June and September 2015. A questionnaire was used with data on demographic characteristics and use of dental service. Information related to the location of health units was extracted from the Piracicaba Research and Planning Institute. The service used, categorized in public, private or covenant, was georeferenced using Quantum GIS software 2.18.</p> <p>Results : The sample consisted of 144 adults and the elderly, aged between 23 and 69 years old. The results showed that the private dental service was the most sought (50%), followed by the agreement (26%) and public (22%). The municipality is divided into north, south, east, west and center, and has 47 public health units with dental care. Although there was a greater concentration of public health units with dental care in the northern region (n = 13), the georeferenced showed a greater use of the public service in the eastern and western. The use of private service/covenant was more used among residents of the north and center region.</p> <p>Conclusion : It is concluded that a similar study by other cities is of great relevance, since the data found allow us to know the demand of the dental public services, providing subsidies for the organization and investments, ensuring that those who need it most need, have access to oral health.</p>	<p>SPECIES OF TREPONEMA SPP. DETECTED IN INFECTED ROOT CANALS AND ACUTE APICAL ABSCESS EXSUDATES EZEQUIEL GABRIELLI; FRANCISCO MONTAGNER; AUGUSTO RODRIGUES LIMA; ADRIANA DE-JESUS-SOARES; ALEXANDRE AUGUSTO ZAIA; JOSÉ FLAVIO AFFONSO ALMEIDA; MARINA ANGÉLICA MARCIANO; BRENDA PAULA FIGUEIREDO DE ALMEIDA GOMES PIRACICABA DENTAL SCHOOL - UNICAMP</p> <p>Aim : Different microbial communities have been associated with acute endodontic infections. The majority of the microorganisms are as yet uncultivable or difficult to grow under current laboratory conditions. Treponema species are strict anaerobic bacteria that are involved in several oral diseases. The aim of this study was to detect the presence of Treponema species in infected root canals (RCs) and exudates related to acute apical abscesses (AAAs) as well as to determine positive association between targeted species and clinical signs/symptoms. Method : For this, paired samples of infected RCs and AAAs were collected from 20 subjects. Nested polymerase chain reaction assay with species-specific primers for 16S rDNA and downstream intergenic spacer region was used for microbial detection. The frequency of species and statistical associations between species and signs/symptoms of endodontic origin as well as their simultaneous detection in both milieus were investigated.</p> <p>Results : The results showed that the most frequently detected species were <i>T. socranskii</i> (RC, 17/20; AAA, 15/20), <i>T. denticola</i> (RC, 8/20; AAA, 11/20); <i>T. medium</i> (RC, 6/20; AAA, 9/20); and <i>T. amylovorum</i> (RC, 5/20; AAA, 9/20). Positive correlation was found for simultaneous presence of <i>T. denticola</i> in both RCs and AAAs ($p = 0.01$) and positive association was observed between <i>T. medium</i> and <i>T. vincentii</i> ($p = .037$). No positive statistical association was observed between the targeted species and signs/symptoms.</p> <p>Conclusion : In conclusion the high incidence of Treponema species in RC and AAA samples from the same tooth indicated that they are important pathogens in acute endodontic infections.</p>