In Short


This study determined the effect of PMMA polymer on dynamic viscoelasticity and plasticizer leachability of PEMA-based tissue conditioners. PEMA polymer and PMMA polymer were used in powder form with four combination of 80 wt% ATBC, 15 wt% BPBG and 5 wt% ethyl alcohol as the liquid phase. The dynamic viscoelasticity and plasticizer leaching of each specimen were measured after 0, 1, 3, 7, and 14 days of immersion using DMA and HPLC. A significant difference was found among the materials in the dynamic viscoelasticity and leaching of plasticizer. The materials containing 10 wt% PMMA showed the most stable dynamic viscoelasticity, and showed the lowest leaching of plasticizer.


The silver nano particle-modified titanium surface showed anti-bacterial and anti-adhesive properties to P. gingivalis and A. actinomycetemcomitans. The nano silver did not show any detectable cytotoxicity on cultured human gingival fibroblasts. So this study suggests that silver nano particle-modified titanium surface can be used as an implantable bio-material.


This study analyzed the stress distribution on the connecting areas of the superstructure and supporting structure of the tooth- and implant-supported FDP designs under both static vertical and oblique occlusal loads. The efficiency of the NRC exhibited varying behavior depending on the direction of the load applied. The use of the patratix part of the NRC on the implant site may be more efficient in reducing the stress formation around the implant.


The esthetic result of an auricular prosthesis is influenced by the position of the prosthesis incorporating the implants. The entire surface of the patient’s head is captured by means of a conventional computed tomography. The digital data are used to mirror the contralateral unimpaired ear for restoration of the impaired side. The virtual ear is integrated into a template covering the auricular defect and indexed to the nasal area with computer-aided technology. This virtual template is converted into a synthetic template by using rapid prototyping. This device serves as a positioning aid and drilling template for the implantation of an auricular prosthesis. It substantially improves the symmetrical positioning of the auricular prosthesis with regard to the unimpaired contralateral side of the patient’s face.

5) Titanium surface topography after brushing with fluoride and fluoride-free toothpaste simulating 10 years of use, Fais L, TPDI • July 2012, Vol. 3, No. 2 •

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This study tested the adhesive characteristics of silicone elastomer (A-2186F) with altered catalyst/base silicone ratios (CBR) from (1/10 to 1/70) using rolling ball tack test tensile test was done to examine the effect of the thickness (12, 8, 4mm) of the cohesive silicone layer of prosthesis on its adhesive strength. The rolling distance was reduced with a decrease in CBR, and a thinner cohesive silicone (1/60) layer had a higher peak load. Cohesive silicone can be used as a glueless retentive material for facial prosthesis.


Stress around the tilted and vertical implant with different lengths of cantilever is measured, when loaded with 150N load. In the first test performed (test 1), a single parallelwall screw implant with varying inclinations (0, 15, 30, and 45 degrees) was virtually inserted into the molar area and vertically loaded with 150 N. Then, von Mises stress values of peri-implant bone were evaluated in compact and cancellous bone. In the second test, 4 parallel wall screw-type implants were virtually placed in the interfemoral area of the mandible. In the first configuration, the bilateral distal implants were placed vertically and the cantilevers were 15 mm long. In the second, third and fourth configurations, the posterior implants were inclined 15, 30, and 45 degrees distally and the cantilever extensions were 11.6, 8.3, and 5 mm, respectively. Results showed that the distal tilting of implant with cantilever reduced the amount of stress generated around the periimplant bone.


Patients with microstomia who must wear removable dental prostheses often face the difficulty of being unable to insert or remove the prosthesis because of the constricted opening of the oral cavity. A completely edentulous patient, who developed microstomia along with Raynaud’s phenomenon induced by scleroderma, is presented. This clinical report describes a quick and easy method for fabrication of a sectional custom impression tray connected by press button and a sectional complete denture retained by magnets. A sectional denture that provides ease in placement and removal can be successfully used in clinical practice for treatment of microstomia patients.


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