



▼ POST GRADUATES ABSTRACTS

PG - 68 : EVALUATION OF SHEAR BOND STRENGTH BETWEEN THREE DIFFERENT ACRYLIC TEETH AND HEAT CURE DENTURE BASE RESIN DUE TO THE EFFECTS OF TRIMMING THE RIDGE LAP AREA - AN IN-VITRO STUDY.

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Background: Loss of adhesion between acrylic teeth and denture base is a commonly occurring clinical challenge. Studies that have evaluated that detachment of resin denture teeth from the base is the common reason for repairs.

Methodology: A total of 90 maxillary central incisors artificial denture teeth were selected and divided into three groups namely Acryrock (I), Acrylux (II) and Acryplus (III) . All teeth of each group were trimmed to a specific thickness using a custom-made metal

jig. All teeth were mounted to the acrylic cuboidal block. The shear bond strength was calculated using an INSTRON universal testing machine and the force was applied at the junction of the denture base resin and acrylic resin teeth. And statistical analysis was done using ANOVA.

Results: The trimmed teeth showed significantly higher shear bond strength ($p = < 0.05$). On comparing the groups, Acryrock & Acrylux and Acrylux & Acryplus showed significant difference ($p = < 0.001$) but while

comparing Acryrock and Acryplus no statistically significant variations were found ($p = 1.000$) in both trimmed and untrimmed variants.

Conclusion: Trimmed acrylic teeth showed higher shear bond strength than untrimmed teeth. And there was no difference in the shear bond strength of untrimmed and trimmed of Acryrock to Acryplus but the shear bond strength of untrimmed and trimmed of Acryrock and Acryplus to Acrylux was higher.