

ABSTRACT

EFEK PERENDAMAN RESIN AKRILIK DALAM SEDUHAN TEH
HIJAU PADA KEKUATAN TRANSVERSA*(THE EFFECT OF ACRYLIC RESIN IMMERSION IN GREEN TEA
DRINKS ON TRANSVERSE STRENGTH)*

Background. Acrylic resin is used for denture base because the biocompatibility, good aesthetic, dimension stabilitation, and easy to repair. Green tea is processed unfermented and contain more catechin than other teas. Catechin is compounds a polyphenol, and when contacted to acrylic resin in the long term will reduce the physical properties, such as tranverse strength. **Purpose.** This research purposed to determine the effect of immersion duration of heat cured acrylic resin in green tea (*Camellia Sinensis*) drinks toward the transverse strength. **Method.** This study was an experimental laboratory. The samples used were 24 heat cured acrylic resin with dimension of 65 mm x 10 mm x 2,5 mm. Samples were divided by 4 groups, immersed in aquadest (as a control) and green tea drinks with duration immersion for 6 hours, 12 hours, and 18 hours. The transverse strength value was measured using Autograph type Shimadzu AG-10TE and stastically analyzed by using One way ANOVA. **Result.** The transverse strength test result showed the mean of transverse strength of control group was 1,593; 6 hours immersion durasion was 1,430; 12 hours immersion durasion was 1,279; and 18 hours immersion durasion was 0,934. **Conclusion.** The conclusion of this study is immersion duration of heat cured acrylic resin for 6 hours and 12 hours in green tea (*Camellia Sinensis*) drinks did not affect toward the transverse strength, otherwise 18 hours immersion did.

Keywords: green tea drinks, heat cured acrylic resin, transverse strength.