ABSTRACT

Background: In oral cavity, denture contacts with saliva that contains a lot of protein. The acrylic porosity and saliva can form pellicle that cause plaque and microorganisms, particularly Candida albicans. The growth of candida albicans causing denture stomatitis. As a result, to prevent this problem, the denture can be cleaned using both toothbrush mechanically and denture cleanser chemically. A research conducted by Septian Puji Lestari (2011) showed that bay leaf infusion could inhibit the growth of Candida albicans. Similarly, another research also showed that immersion of denture base made of acrylic resins in denture cleansers could affect the properties of acrylic resin. Objective: This research is used to know the effect of heat cured acrylic resin immersion in bay leaf infusion on its transverse strength Method: Acrylic resin plate samples with size (65 x10 x2.5 mm) containing 42 specimens made through heat-cured acrylic resin polymerization were divided into 6 groups. First, control groups consisted of 21 specimens and immersed in distilled water for 4 days (group A), for 12 days (group B), and for 19 days (group C). Meanwhile, treatment groups consisted of 21 specimens immersed bay leaf infusion for 4 days (group D), for 12 days (group E), and for 19 days (group F). Result: There was no significant difference of the transverse strength of heat cured acrylic resin immersed in bay leaf infusion for 4 days, 12 days, and 19 days (p < 0.05). Conclusion: Immersion process of heat cured acrylic resin in bay leaf infusion has no effect on its transverse strength.

Keywords: heat cured acrylic resin, bay leaf infusion, transverse strength