ABSTRACT

SURFACE ROUGHNESS OF CONVENTIONAL GLASS IONOMER CEMENT AFTER SOAKING IN KEFIR

Background. *Kefir was known as health beverage with sour taste. Based on conventional glass ionomer cement characteristic which has high solubility in acid solution, it is possible that the consumption of kefir will affect the surface roughness of conventional glass ionomer cement.* ***Purpose.*** *The aim of this study was to know the surface roughness properties of conventional glass ionomer cement after being soaked in kefir.* ***Method.*** *This research using post test only control group design. Conventional glass ionomer cement sample have the shape of beam with dimensions length 10 mm, width 4 mm, dan height 2,5 mm, soaked in kefir for 6 minutes, 18 hours, 36 hours, and 108 hours. As control, sample soaked in aquadest for 6 minutes, and 108 hours. The data were analyzed statistically oneway Anova, continued with Least Significant Difference (LSD) test with significance level of 5%.* ***Results.*** *All groups presented rougher surfaces after immersion. There are significant difference on the average value of surface roughness between group which was soaked in aquadest for 6 minutes compared group that soaking in kefir for 36 hours and 108 hours, also between group which was soaked in kefir for 6 minutes compared to the group that was soaked in kefir for 108 hours.* ***Conclusion.*** *Soaking the conventional glass ionomer cement into kefir cause the surface roughness rougher than soaking in aquadest. The more lengthier for immersion both in kefir or aquades the greater surface roughness will be increased.*

Keywords: *conventional glass ionomer cement, acid, kefir, surface roughness.*