ABSTRACT

Background. Resin composites are used to replace missing tooth structures and to modify the colour and contour of the tooth. The surface quality of dental restorations is one of the important factors that determine the success of the restoration. **Purpose.** Was to observe the surface roughness of hybrid composite resin after immersion into energy drinks of pH 3,2: 3,7: 3,9 for 2 hours. **Method.** Hybrid composite resin was cured with LED light curing unit. Specimens were divided into 3 experimental groups and 1 control group. The experimental groups were immersed in different energy drink (pH 3,2; 3,7; 3,9) for each group and the control group was immersed in aquadest for 2 hours. The surface roughness was measured using surface roughness measuring instrument before and after immersion. Data obtained was analyzed using Within-Subjects Effects test to determine significant differences between sample groups. **Results.** There was not significant differences in surface roughness between sample groups (α > 0,05). **Conclusion.** The surface roughness of hybrid composite resin were not increased after being immersed in acid energy drinks (pH 3,2; 3,7; 3,9) for 2 hours.

Key words: composite resin hybrid, energy drink, surface roughness