ABSTRACT

EXPOSURE OF CITRUS LIMON BURM f. JUICE TOWARDS THE SURFACE ROUGHNESS OF HYBRID COMPOSITE RESIN

Abstract

Background: The smooth surface of the composite resin is important to prevent damage to the soft and periodontal tissues. The exposure of the composite resin towards acidic substances could cause surface damage of the composite resin. Lemon juice with acidic pH is often consumed by people for health reasons. Until now there is no data about the effect of lemon juice towards surface roughness.

Purpose: To determine whether the exposure to Citrus limon Burm f. for 5 minutes everyday during 14 days would make an increase to the surface roughness of the hybrid composite resin.

Method: The surface roughness measurement of the hybrid composite resin is done by comparing 2 sample groups, the control group and the variable group. Both samples were put in the desicator for 14 days. Nothing was done to the control group, whereas the variable group was exposed in Citrus limon Burm f. juice for 5 minutes everyday during 14 days. After the 14th day, the measurement of the surface roughness was done with the surface roughness measurement instrument.

Result: The result of the Independent T-Test showed that there is a significant difference to the surface roughness of the hybrid composite resin between the control group and the variable group.

Conclusion: The surface roughness of the hybrid composite resin is increased after exposed by Citrus limon Burm f. for 5 minutes everyday during 14 days.

Keywords: Citrus limon Burm f., hybrid composite resin, surface roughness