World Academy of Science, Engineering and Technology International Journal of Medical and Health Sciences Vol:12, No:06, 2018

Water Sorption of Self Cured Resin Acrylic Soaked in Clover Solution

Authors: Hermanto J. M, Mirna Febriani

Abstract : Resin acrylic, which is widely used, has the physical properties that can absorb liquids. This can lead to a change in the dimensions of the acrylic resin material. If repeated immersions were done, its strength would be affected. Disinfectant solutions have been widely used to reduce microorganisms both inside and outside the patient's mouth. One of the disinfecting materials that can be used is a clover solution. The purpose of this research is to find the ratio of water absorption of the acrylic resin material of self-cured type, soaked in clover solution for 10 minutes. The results showed that the average value obtained before soaked in clover solution was 0.0692 mg/cm3 and after soaked, in clover solution, the value was 0.090 mg/cm3. The conclusion of this research shows that the values of water sorption of acrylic resin before and after soaked in clover solution is still in ISO standard 1567/2001. Differences in water sorption value of self-cured acrylic resin before and after the immersion are caused by the process of liquid diffusion into the acrylic resin.

Keywords: absorption of fluid, self-cured acrylic resin, soaked, clover solution

Conference Title: ICACDO 2018: International Conference on Advanced Cosmetic Dentistry and Orthodontics

Conference Location: London, United Kingdom

Conference Dates: June 28-29, 2018