ABSTRACT

The purpose of this experimental laboratories research is to know whether there is microorganism contamination and what kind of microorganism on the heat cured acrylic palate through polishing materials.

Sterile pumice and whiting slurry were let in the air for 4 and 24 hours. Heat cured acrylic plate that have been sterilized divided into 2 groups, A and B. Group A used polishing materials let in the air for 4 hours and group B for 24 hours. Group A and B was divided again into 2 group, I and II. Group I was exposed to pumice slurry only for 15 minutes and the Group II exposed to pumice slurry for 15 minutes then whiting slurry for 10 minutes. Each group used 10 heat cured acrylic plate, so totally is 40 heat cures acrylic plate. After exposed with the polishing materials, heat cured acrylic plate washes with sterile water, then heat cured acrylic plate enter into Brain Heart Infusion (BHI) for 2 hours and then 0.1 ml from BHI spread on Blood agar (BA) palate. It Was incubated for 24 hours.
The result of this research was analyzed descriptively. There was significant difference on the amount of microorganisms (CFU/ml) between heat cured acrylic that exposed pumice slurry only and with pumice slurry then whiting slurry. There was also significant difference on the amount of microorganisms (CFU/ml) between heat cured acrylic that exposed material polishing let in the air 4 and 24 hours. Kinds of microorganisms that founded are coccus, bacillus Gram (+), bacillus Gram (-), bacillus with spora Gram (+).

Key Words: Pumice, whiting, Contamination, heat cured acrylic.