ABSTRACT

Pineapple Peel Extracts (Ananas comosus (L) Merr.) Effectivity as Desinfection on Acrylic Resin for inhibits the formation of Candida albicans

Background: Pineapple peel extracts contains active compound among others, enzym bromelin, flavonoids, saponins, and tanins have anti-fungal. Acrylic resin is the most common material used for removable denture base. However, the character of porous in acrylic resin can possibly become a place for Candida albicans. As a result, this condition can increase the number of C.albicans in oral cavity, one of which is Candida albicans. C.albicans even can grow rapidly in dentures with poor oral hygiene. Objective: To determine effectiveness of pineapple peel extracts as desinfection on acrylic resin for inhibiting the formation of fungus candida albicans.

Materials and Methods: First for the treatment groups acrylic plates that had been contaminated with C.albicans were soaked in pineapple peel extracts with a concentration 6,25%,12,5%,25%. Meanwhile, for control group the plate was soaked in sterile distilled water. Next, after the acrylic plates were placed over a vibrator to loss fungal colonies, spreading was conducted on Sabboroud Dextrose Agar to count the member of C.albicans manually with colony forming unit (cfu/ml). Result: Significant difference among those treatment groups. It is known from the value of $p<0.05$. Conclusion: The most concentration of pineapple peel extract can inhibits the growth of C.albicans is 25%.

Keyword: Acrylic resin, Candida albicans, Pineapple peel extract