ABSTRACT

THE EFFECT OF THE RIND OF PUNICA GRANATUM LINN INFUSIONS CONCENTRATIONS IN INHIBITING THE GROWTH OF CANDIDA ALBICANS IN REMOVABLE DENTURE USERS

Background. Application of removable denture – acrylic resin based is a trigger to increase the colonies of Candida albicans in oral cavity, especially for the patient with poor oral hygiene. In avoiding negative effects happened by increasing of Candida albicans, the patient need antifungals in order to inhibit the growth of Candida albicans colonies. One of those natural antifungal is the rind of Punica granatum Linn. Purpose. The aim of this study was to know the effect of Punica granatum Linn infusion concentration in inhibiting the growth of Candida albicans in removable denture users. Method. This research was done in laboratory to account the growth of Candida albicans as unit of experiment resulted from the swab in acrylic resin of removable dentures users. This experiment has tested the antifungal effect of the rind of Punica granatum Linn infusions to Candida albicans in Saboroud Agar plate, in some concentrations, made from serial dilution system, in 100%; 50%; 25%; 12,5%; 6,25%; 3,125%; 1,625%; 0,8125%. All units of experiment were examined by accounting the number of Candida albicans colonies before and after testing by the rind of Punica granatum Linn infusions. Result. There were significant differences (p<0,05) of antifungal effect of the skin of Punica granatum Linn infusion in groups of 12,5%; 6,25%; 3,125%; 1,625% concentration to Candida albicans. There were not significant differences of antifungal effect of the rind of Punica granatum Linn infusion in group of 0,8125% concentration to Candida albicans. Conclusion. The effect of the rind of Punica granatum Linn infusions are able to inhibit the growth of Candida albicans in removable denture users, by the lowest concentration, 25%.

Keywords: Removable denture, Candida albicans, Punica granatum Linn