EFFECT OF THE EFFECTIVENESS OF GREEN TEA LEAF EXTRACT (Camellia sinensis) 100 % AND Chlorhexidine gluconate 0.2 % AS AN ARTIFICIAL TEETH CLEANER OF Candida albicans colonies

ABSTRACT

Green tea leaves (Camellia sinensis) contains phytochemical compounds consisting of saponins, tannins, essential oils, and flavonoids. Flavonoids in green tea leaves have the ability to inhibit and kill bacteria and fungi. The growth of Candida albicans in denture acrylic resin can cause problems for users in the form of denture stomatitis. The purpose of this study was to determine the effect of green tea leaf extract effectiveness of 100% and chlorhexidine gluconate 0.2%

as a denture cleanser against Candida albicans colonies.

The study was conducted using 15 acrylic resin discs with a diameter of 10mm and a thickness of 2 mm. The whole resin was incubated in 10 ml of a suspension of Candida albicans for 24 hours at 37 °C. Acrylic resin is divided into 3 groups, each group consisting of acrylic resin 5 discs soaked in green tea leaf extract at a concentration of 100 %, Chlorhexidine gluconate 0,2% and sterile distilled water as a control. Soaking performed for 8 hours later dilution series and each group is taken 0.01 ml grown in Sabouraud Dextore Agar, then incubated at 37 °C for 24 h and counted the number of colonies of Candida albicans. The data obtained and analyzed by one-way ANOVA followed by LSD.

The results showed there were significant differences in the concentration of green tea leaf extract 100% and Chlorhexidine gluconate 0.2% to the growth of Candida albicans (p < 0.05). The conclusion from this study is the green tea leaf extract and Chlorhexidine gluconate 0.2% as the effect of denture cleansers on the growth of Candida albicans colonies. Green tea leaf extract concentration of 100% of the most effective as a denture cleanser to the growth of Candida

albicans colonies.