Abstract

Background. Caries is one of the general problems that usually happen. Kurative efforts to handle this problem can not decrease the incidence, moreover it is increased along with age. So, a preventative effort is the best alternative to decrease the incidence of caries. One of way is controlled the causal bacteria that is Streptococcus mutans. Green tea (Camellia sinesis) and Betel Leaf (Piper betle) had an antibacterial effect and both of them were popular in people community. It is can be an alternative preventive effort to decrease incidence of caries. Purpose. The aim of this study is to compare antibacterial effect of Green tea extract (Camellia sinesis) and Betel Leaf extract (Piper betle) to Streptococcus mutans.

Method. This research was done in disc diffusion test with 3 groups. First group is Green tea extract 20%, second group is Betel Leaf extract 20% and the last group is control negative group that use aquades. Incubated in anaerobic jar 2x24 hours, 37°C. Account the diameters of inhibiting zone with calipers.

Result. There were significant differences between first group and second group (p<0.05).

Conclusion. Green tea extract (Camellia sinesis) is more effective than Betel Leaf extract (Piper betle) to Streptococcus mutans. Extract (Camellia sinesis) and Betel Leaf extract (Piper betle) can used be an alternative natural material to decrease incidence of caries.

Keywords: Green tea extract, betel leaf extract, caries, antibacterial effect.