ABSTRACT

Background. Green tea is a natural ingredient that is often consumed by public at large, as a beverage. Besides consumed as a beverage, green tea also has many uses for the body. For oral health, green tea has a role as a prevention of dental caries. In green tea contains catechins, which functions much to inhibit the growth of microbes, including Streptococcus mutans. Addition of green tea extract can be used as an antibacterial ingredient in toothpaste as a substitute for a detergent that is widely used in toothpaste on the market. Purpose. The aim of the present study is to know the difference between the inhibition of toothpaste containing green tea extract at a concentration of 0.25%, 0.5%, 0.75% and 1% against Streptococcus mutans. Method. Taken 0.5 ml culture of S. mutans and poured in seed medium TYC plate. Sensitivity test diffusion method is done to know inhibition of toothpaste plus detergent and green tea extract toothpaste with a concentration of 0.25%, 0.5%, 0.75% and 1% against Streptococcus mutans performed 7 replicate samples. Results. There is difference of inhibition between toothpaste containing green tea extract at a concentration of 0.25%, 0.5%, 0.75% and 1% (P = 0.00 < p = 0.05). Conclusion. Toothpaste containing 1% green tea extract is better than toothpaste containing 0.25%, 0.5% and 0.75% green tea extract.

Key words: Green tea toothpaste, Inhibition, Streptococcus mutans