FACULTY OF DENTISTRY
ANDALAS UNIVERSITY
Script, March 2016
Randy Fernandes (1210341002)

Differences in Effectiveness Toothpaste Gel formulation with Paste in Maintaining Normal Salivary pH

vi + 65 pages + 4 images + 7 tables + 7 attachments

ABSTRACT

Saliva is oral fluids consisted of mixture of secretions from major and minor salivary glands. Salivary pH ranges from 5.6 to 7.0 with average in 6.7. Teeth brushing could change salivary pH. Toothpaste which distribute among our society nowadays is either gel or paste contain xylitol or sorbitol. Xylitol and sorbitol are able to stimulate the secretion of saliva therefore increase buffering capacity and pH of saliva.

This research is an experiment with pre-test post-test study design. This research used 36 samples. The measurement of the pH of saliva was performed five times: before brushing, 5, 10, 30 and 60 minutes after brushing with toothpaste.

Result showed significant differences in before brushing with 5 minutes after brushing, and 5 minutes with 10 minutes after brushing. While in 10 minutes with 30 minutes after brushing and 60 minutes with 30 minutes after brushing there was no significant differences. The average pH of saliva by gel formulation is more fluctuating than pH saliva by paste formulation which tends to decline as time changes in normal circumstances and more stable to maintain normal salivary pH.

The conclusion of this research is toothpaste with paste formulation is more stable in maintaining normal pH of saliva compared to toothpaste with gel formulation.

Literature : 36 (1973-2013)
Keywords : salivary pH, toothpaste gel formulation, toothpaste paste formulation