Abstract

This study was an experimental laboratory. The aim of study was to know the site-specific retention rate and possibility of fluoride retention in saliva after tooth brushing program in primary school children. The subjects were 7 students aged 6-7 year-old, who were in the first and second year class, and had free caries. They were intervened with tooth brushing campaign with sodium monofluorophosphat paste. Subsequently they received 3 time treatments, 1); brushing teeth by following rinsing as usual as they did, 2); brushing teeth by following single rinsing, and 3) brushing teeth without rinsing. The difference of fluoride retention in saliva was analyzed with Kruskal Wallis and post-hoc Mann Whitney. The results showed that the mean concentration of fluoride retention in saliva after 10 minutes tooth-brushing with single rinsing was higher than that of concentration fluoride retention in saliva as usual ($p<0.05$), while the concentration of fluoride retention increased significantly from 0.282 to 0.386 ppm ($p<0.05$) after 10 minutes tooth brushing with single rinsing. Unfortunately, there was no significant difference between tooth brushing with single rinsing and tooth brushing without rinsing. As conclusion, the highest concentration of fluoride retention in saliva was after tooth brushing followed with single rinsing could be recommended for dental prevention program through school health service programs in primary school children.

Key words: tooth brushing campaign, fluoride retention, saliva