DIFFERENCES OF FLUORIDE LEVELS IN MICE TEETH AFTER APPLICATION FLUORIDE PACTH ON DORSAL MICE THAT WERE SHAVED MANUALLY AND ELECTRICALLY

ABSTRACT

Fluoride applications can be used as a preventive caries action. The use of fluoride can be done systemically and topically. One example of fluoride topical application in patch or known as transdermal drug delivery (TTD). TTD could reduce drug adverse effects and increased the success of drug therapy. This research aimed to know the differences of fluoride levels in mice teeth after application fluoride patch on dorsal mice that were shaved manually and electrically.

This type of research was an in vivo experimental with post test control group design. Twenty wistar strain mice were divided into 4 groups. Group that shaved electrically and applied patch fluoride (EF), group shaved manually and applied fluoride patch (MF), group shaved manually and applied patch without fluoride (MK), and group shaved electrically and applied patch without fluoride (EK). Fluoride levels in the incisors teeth examined with a spectrophotometer Uvis then analyzed with Kruskal Wallis test.

The results showed the average levels of fluoride in EF: 0.96 ± 0.03; MF: 0.99 ± 0.02; MK: 1.00 ± 0.02; and FK: 0.97 ± 0.00. Kruskal Wallis test resulted in $p = 0.126$ ($p > 0.05$), means that there were no significant differences of fluoride levels in all four treatment groups.

Conclusion: there was no difference in the levels of fluoride in mice teeth after application fluoride patch.

Keywords: Patch Fluoride, Teeth Fluoride Levels.