ABSTRACT

Background Indonesia is a developing country with a population which mostly have a habit of smoking. 85 up to 90% of cigarettes in Indonesia is the cigarette Kretek. Cancer in the oral cavity usually begins with irritation of the products smoked cigarettes continually, from burning tobacco causes oral mucosal thickening on the network. Abnormalities of the oral cavity malignancy begins with changes in mucosal epithelial displastic. In the dysplastic mucosa was experiencing 30% had malignancy. Changes in mucosal epithelial displastic oral cavity can be detected quickly by cytologic examination methods. Purpose To determine changes in oral mucosal epithelium in smokers through cytologic examination. Method swabing cheek mucosa of subjects by using a wooden spatula as much as three times swabing in equal parts with medium pressure. Sample smeared on a glass object, then the stocks included in the fixation solution (solution I) for ± 3 seconds and dry. The sample included in the solution for Eosin (solution II) for ± 30 seconds and washed with water. The sample included in the solution Metylene Blue (solution III) for ± 25 seconds and washed with water. Preparations dried using a hair dryer and closed with a cover glass using entelan. Results preparations were observed using a microscope. Results data analysis using independent t-test test when data showed normal distribution normality. Initial step before performing an independent t-test test which was to determine the mean value. Then tests of homogeneity with Levene's test test, the result is not homogeneous then the test t-test using non-equal variances assumed. Difference test using the t test of significance to say there is a difference when p < 0.05. Results of different test showed 0.000 significance is p < 0.05, it can be said there was a significant difference. Conclusion There are changes in mucosal epithelial cells in smokers by cytology cheek because there are significant differences in the number of cells that experienced a change between the groups exposed to smokers as a group with a group of non-smokers as the control group.

Keywords: smoking, cheek mucosa, dysplasia