



▼ POST GRADUATES ABSTRACTS

PG - 65 : COMPARISON OF SALIVARY ACETALDEHYDE LEVEL IN SMOKERS WITH LEUKOPLAKIA AND WITHOUT LEUKOPLAKIA AND ITS CORRELATION WITH THE HISTOPATHOLOGICAL FINDINGS

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Introduction: Smoking is the predominant etiological factor for the development of potentially malignant disorder and Oral Leukoplakia is the most common potentially malignant disorder seen in the oral mucosa. Tobacco smoking is identified as one among the common cause for both oral leukoplakia and acetaldehyde

production in the human body. Acetaldehyde not only is toxic but also is a known to dissolve in the saliva during smoking and act as a local carcinogen in the human upper digestive tract.

Aims and objectives: To estimate salivary acetaldehyde levels in smokers and compare the acetaldehyde levels between smokers with leukoplakia and smokers without leukoplakia.

Materials and method: A Total of 126 subjects with the habit of smoking were included in the study. Smokers with leukoplakia Group A (n 63) and without Leukoplakia the Group B (n 63). Unstimulated whole saliva was collected from the cases and controls. Salivary acetaldehyde level was estimated using Head space Gas chromatography mass spectrum. Independent t- test was used to compare the difference of salivary acetaldehyde between two groups. One Way ANOVA to compare the salivary acetaldehyde level between three histopathological grading while the average

salivary acetaldehyde value of the two groups and their measure of dispersion from the mean values using arithmetic mean and standard deviation.

Results: Smokers with leukoplakia had significantly higher level of acetaldehyde ($155.10 \pm 9.59 \mu\text{l}$) in comparison to the Smokers without leukoplakia ($116 \pm 4.8 \mu\text{l}$). ($P < 0.001$).

Conclusion: We inferred from our study that smoking is one of predominant etiology in increasing salivary acetaldehyde levels. Salivary acetaldehyde levels are higher in smokers with oral leukoplakia but do not show a statistically significant correlation with the histopathological grading of Oral Leukoplakia.