

EVALUATION OF ORAL LESIONS IN TOBACCO SMOKERS IN
SRI LANKA - AN EPIDEMIOLOGIC ASSESSMENT

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The present study was undertaken in order to determine the influence of smoking on the development of oral precancer and oral cancer.

To study this cause & effect association, a random sample of 1287 male patients attending the hospital out-patients clinics of Anuradhapura (767), Jaffna (248), Kandy, Kurunegala and Nuwara Eliya (272) were examined. The age group examined was over 20 years because the prevalence of the oral mucosal lesions were extremely low before this age³. The WHO (1978)² Diagnostic Criteria for oral precancerous lesions has been used in this study. The Chisquare (χ^2) test with Yate's correction was used to determine the significant association between smoking and oral cancer and oral precancerous lesions adopting ($P=0.05$) as the minimum level of significance⁴.

Oral precancerous lesions and oral cancer were found in 85 (6.6%) smokers and in 42 (3.26%) non smokers of the total 1287 patients. Statistically significant association was observed with the development of oral precancerous lesions and oral cancer and smoking at 5% level ($P<0.05$).

* $\chi^2_c > \chi^2_t$ for the places given below:
Anuradhapura 4.87 > 3.84 ($P<0.05$)
Jaffna 9.46 > 3.84 ($P<0.05$)
Kandy }
Kurunegala } 6.46 > 3.84 ($P<0.05$)
Nuwara Eliya }

This study confirms previous reports¹ that there is a strong association between smoking and oral leukoplakia. The prevalence of oral precancerous lesions and oral cancer in the smoker group was 6.26% in Anuradhapura, 6.45% in Jaffna and 7.72% in Kandy, Kurunegala and Nuwara Eliya. There was no statistically significant difference seen in the prevalence of oral precancerous lesions and oral cancer among these districts. However, the difference in the percentages of prevalence of these lesions may be accounted to the other aetiological factors influencing these lesions.

Further investigations are in progress in order to show the interplay of the other aetiological factors on oral precancerous lesions and oral cancer such as betel chewing with tobacco.

* χ^2_c = calculated value, χ^2_t = table value

Reference

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