THE EFFECTS OF BETEL CHEWING ON THE ORAL LESIONS IN TOBACCO SMOKERS IN SRI LANKA

A.D. Patrick and B.R.R.N. Mendis
Dept. of Oral Pathology, Faculty of
Dental Science, University of Peradeniya

The aim of this investigation was to assess the occurence of oral lesions in a sample of tobacco smokers in Sri Lanka and to analyse the effects of betel chewing, if any, on the oral lesions in these tobacco smokers.

A random sample of 1648 individuals drawn from the male patients above 20 years of age who attended the out patient departments of the General Hospitals of five districts in Sri Lanka were examined for oral lesions. The guidelines to epidemiology and diagnosis of oral lmucosal diseases and conditions of the WHO used to assess the oral lesions.[1] The chi-square test and the multivariate discrete analysis[2] was used to ascertain the statistical relationship between the aetiological factors and oral lesions.

The frequency of oral lesions seen among smokers was 12.64% Leukoedema, 11.64% Leukoplakia, 3% leukokeratosis nicotina palati, 0.08% Erythroplakia, 0.30% Submucous Fibrosis, 1.69% Lichen Planus and 1.06% Carcinoma. The average age for individuals with Leukoplakia, Leukoedema, Carcinoma and Lichen Planus were 46.65, 43.90, 51.70 and 44.42 respectively and their confidence intervals show that it was significantly higher than the average age of the rest of the sample ($P < .001$). Statistically significant association was detected with Leukoedema and smoking, and leukoplakia and smoking ($P < 0.05$).

Of the 597 (53.16%) smokers who chewed betel 19.43% had premalignant oral lesions, whereas in 46.83% smokers who did not chew betel at all, only 9% had premalignent oral lesions, ($P < 0.05$). The betel chewing, smoking duration, smoking quantity and age of the patients were analysed. The two-factor-effect and three-factor-effect namely

(a) betel chewing and smoking duration
(b) betel chewing and age
(c) betel chewing and smoking quantity
(d) betel chewing, smoking duration and age

were calculated. The effects on producing oral lesions were steadily increased. This study shows that the effect of smokers having oral lesions is higher when it interacts with other aetiological factors such as betel chewing rather than when it acts alone.

References:

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