

Abstract

OBJECTIVE: To determine the influence of oral hygiene habits and practices on the risk of developing oral leukoplakia. **DESIGN:** Case control study. **SETTING:** Githongo sublocation in Meru District. **SUBJECTS:** Eighty five cases and 141 controls identified in a house-to-house screening. **RESULTS:** The relative risk (RR) of oral leukoplakia increased gradually across the various brushing frequencies from the reference RR of 1.0 in those who brushed three times a day, to 7.6 in the "don't brush" group. The trend of increase was statistically significant (χ^2 for Trend : $p = 0.001$). The use of chewing stick as compared to conventional tooth brush had no significant influence on RR of oral leukoplakia. Non-users of toothpastes had a significantly higher risk of oral leukoplakia than users (RR = 1.8; 95% confidence levels (CI) = 1.4-2.5).

Among tobacco smokers, the RR increased from 4.6 in those who brushed to 7.3 in those who did not brush. Among non-smokers, the RR of oral leukoplakia in those who did not brush (1.8) compared to those who brushed was also statistically significant (95% CL = 1.6-3.8).

CONCLUSION: Failure to brush teeth and none use of toothpastes are significantly associated with the development of oral leukoplakia, while the choice of brushing tools between conventional toothbrush and chewing stick is not. In addition, failure to brush teeth appeared to potentiate the effect of smoking tobacco in the development of oral leukoplakia.

Recommendations: Oral health education, instruction and motivation for the improvement of oral hygiene habits and practices; and therefore oral hygiene status, should be among the strategies used in oral leukoplakia preventive and control programmes.