Oral Candida carriage and species prevalence amongst habitual gutka-chewers and non-chewers

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Abstract
Oral Candida colonisation is higher in tobacco smokers as compared to non-smokers; however, it remains unknown whether smokeless tobacco chewers are susceptible to increased oral Candida colonisation. The aim was to determine the oral Candida carriage and species prevalence amongst habitual gutka-chewers and non-chewers in a cohort from Karachi, Pakistan. Forty-five gutka-chewers and 45 non-chewers were included. Information regarding age, sex, duration of gutka-chewing habit, daily frequency of gutka consumption, duration of holding gutka in the mouth, daily frequency of tooth-brushing and tongue brushing was collected using a questionnaire. Oral yeast samples were collected by scraping the dorsum of the tongue and bilateral buccal mucosa with a sterile cotton swab. Identification of yeast species was performed using standard techniques. Tongue lesions were identified and recorded. Unstimulated whole salivary flow rate (UWSFR) was also measured. There was no significant difference in the mean age, UWSFR and oral Candida carriage among gutka-chewers and non-chewers. Individuals were chewing gutka since 4.4 years and were consuming five gutka sachets daily. Candida albicans (C. albicans) was the most common yeast species isolated from 57.8% gutka-chewers and 64.4% non-chewers. In 24.4% gutka-chewers and 22.2% non-chewers, two candidal strains (C. albicans and Candida tropicalis) were isolated. In conclusion, the present results indicated no significant difference in oral Candida carriage in habitual gutka-chewers and non-chewers.

Keywords
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