

CANDIDIAL CARRIAGE AMONGST PATIENTS WITH ORAL LICHEN PLANUS

C.J. SENEVIRATNE,¹ A.D.S. ATUKORALA,¹ H.N. FERNANDO,¹ M.A.M. SITHEEQUE,¹ A. ARIYAWARDANA,¹ G.J. PANAGODA,¹ L.P. SAMARANAYAKE²

¹Department of Oral Medicine and Periodontology, Faculty of Dental Sciences, University of Peradeniya, ²Department of Oral Biosciences, University of Hong Kong

Candida species are by far the commonest aetiological agents responsible for oropharyngeal and systemic fungal infections both in health and disease. Candidosis is usually associated with local and systemic predisposing factors. Oral Lichen Planus (OLP) is a chronic mucocutaneous inflammatory disease affecting the oral mucosa. However the occurrence and relevance of candidal infection in lichen planus has not been adequately described. Therefore the aim of the present study was to analyze the oral carriage of *Candida* species among patients with OLP.

Thirty one OLP patients whose disease was confirmed histopathologically were selected for the study. Phosphate buffered saline (PBS) mouthwash samples were collected and inoculated in Sabouraud's agar to detect the presence of *Candida*. Subsequently species were identified using CHROMagar. Twenty healthy patients without oral mucosal lesions were included in the control group and subjected to the same procedure. Candidal carriage was defined as the presence of yeasts on inoculated plates. Furthermore age, sex, type of lesion, site of lesion, mode of treatment, duration of the lesion, duration of treatment, presence of desquamative gingivitis, and habit of smoking were also recorded from OLP patients.

The mean age of the test (13 males and 18 females) and control groups (10 males and 10 females) were 46.5 (\pm 12.7) and 41.5 (\pm 11.0) years, respectively. There was no significant difference in the two groups with respect to age and gender distribution. Prevalence of candidal carriage of OLP patients was 67.7 % (n = 21), whereas it was 50 % (n = 10) in healthy individuals. *C. albicans* was the predominant species comprising 38.7 % (n = 12) in the test and 40 % (n = 8) in the control group. Interestingly there was a high percentage of *C. krusei* (19.6 %; n = 6) in OLP group in contrast to 5 % (n = 1) in healthy subjects. However, this difference was not statistically significant. Oral candidal carriage rate was not affected by type, site and duration of the lesion. Furthermore, the mode and duration of treatment did not have any significant impact on the candidal carriage rate. Moreover, habit of smoking and presence of desquamative gingivitis were also unrelated to carriage rate.

It could be concluded that oral carriage of *Candida* in OLP patients was independent of clinical characteristics of the lesion and mode of treatment. However it is noteworthy to bear in mind the high oral carriage rate of *C. krusei* as this species is particularly associated with increased azole resistance.

