

**A STUDY OF THE EFFECTS OF DIABETES MELLITUS, ORAL
HYGIENE STATE AND DENTURE WEARING HABITS ON THE
CARRAGE OF CANDIDA IN DENTURE INDUCED STOMATITIS.**

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Abstract

Denture induced stomatitis is a common occurrence in denture wearers due to proliferation of the fungi species, *Candida*. Studies were carried out for the first time in a group of Sri Lankans to determine whether *diabetic* patients have a significantly higher predilection to *denture induced stomatitis* than normal age and sex matched subjects and to identify any other local and general predisposing or contributory factors.

A questionnaire was filled by the patient in order to collect relevant information regarding general, medical and dental conditions that might be useful for the study. More than 60 patients were screened and a total of 38 individuals affected by *denture induced stomatitis* was selected. Twenty two of them were confirmed as *diabetics*.

A modified oral rinse and an imprint culture technique on sterile SDA was done to isolate *Candida* from the dentures to obtain quantitative and visual values. Dentures used in this study were mainly full, but partial dentures with large bases having more than eight teeth were also considered.

Visual colonies present in *diabetics* was on average 7.7 and in *non diabetics* 5.4 per denture. Colony counts were 587×10^5 and 372×10^5 for the two groups respectively. Poor oral hygiene and continuous wearing of the dentures throughout the day and night also resulted in a higher carriage of *Candida*. Females had a lower *candidal* count than males. The results

shows that there is a clear difference between the groups, confirming the universal acceptance that *diabetes* is one of the major predisposing factor in *oral candidosis*. This is true for this study done in a group of Sri Lankans.