

## **Denture Stomatitis in Sri Lankan Type 2 Diabetic Patients: A Comparative Proportional and Clinicopathological Analysis with Existing Literature**

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Patients with Diabetes Mellitus (DM) are more susceptible to develop Denture stomatitis (DS) which is classified as a *Candida* associated lesion. The aim of the study was to present the proportion and clinicopathological characteristics of DS in a group of Sri Lankan Type 2 DM patients and compare the results with cases published in the existing literature. A descriptive cross-sectional study was conducted on 352 DM patients, including 94 denture wearers aged over 18 years, who had been receiving treatment for at least one year at the Teaching Hospital Peradeniya, to detect DS using clinical photographs and Periodic Acid-Schiff (PAS)-stained cytological specimens. These results were compared with proportion of DS patients identified among 923 DM patients published in the literature. In our study, proportion of DM patients presenting with DS was 4% (14/352) compared to 16.6% (153/923) DS prevalence identified in the literature. In addition, in our study sample, the prevalence of DS among Diabetic denture wearers were 14.9% (14/94), in contrast to 28.6% (45/157) in the published literature. The Majority (78.6%) (11/14) of DS patients were females in our study with a similar trend observed in the literature showing a female predominance of 66.7%. Literature revealed that denture wearers with elevated glycemic levels (> 148 mg/dl) had a higher chance of presenting with DS, which could not be supported in our study. Regarding the clinical presentation of DS, our study revealed 21.4 % and 78.6% of Newton Type 1 and Type 2 lesions respectively. Similar to literature majority of DS lesions identified in our study were Type 2 lesions. However, in contrast to literature where majority of Type 2 lesions were associated with symptoms all our DS patients were asymptomatic and the lesions were diagnosed as incidental findings. Similar to literature findings all DS patients had poor denture hygiene. In contrast to literature where DS was also associated with Angular cheilitis, none of our denture wearers and DS patients presented with this condition. In conclusion, the low prevalence of DS identified in Type 2 diabetic patients in our study compared to literature is most probably due to good Diabetic management. It is also noteworthy that all DS patients in our population were asymptomatic, although Newton Type 2 lesions are generally associated with symptoms according to the literature.

**Keywords:** Diabetes mellitus, *Candida*, denture stomatitis, glycemic level, Newton classification