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The Evaluation Of Streptococcus Mutans Content Of Saliva In Patients With Recurrent Oral Ulceration

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Introduction: Recurrent oral ulcer is a chronic inflammatory condition characterized by mucosa ulceration, which was believed to have bacterial etiology. Streptococcus mutans is one of the bacteria which have been implicated in this case; it is gram-positive bacteria that reside in the biofilms on the tooth surfaces. The aim of this study was to evaluate Streptococcus mutans content in saliva of recurrent oral ulcer patients and its role as a prognostic factor. Materials and Methods: Saliva samples were obtained from 60 patients. They were divided into two groups, 30 recurrent oral ulcer patients and 30 controls. Sample of whole unstimulated saliva was collected and dropped onto the Caries Risk Test bacteria kit media by micropipette. After incubation at 37oc for 48 hours, the viable colonies were observed and the presence of Streptococcus mutans was determined semiquantitatively. The association between level of salivary Streptococcus mutans and the occurrence of the recurrent oral ulcer was tested using chi-squared test with p≤0.05 was accepted as significant. Results: The level of Streptococcus mutans was significantly higher in oral ulcer group as compared to the control group (p=0.009782). Male shows higher Streptococcus mutans concentration than female in both groups. Conclusion(s): Positive Streptococcus mutans colonization in the saliva were most pronounced in patients who has recurrent oral ulcer, suggesting that there is a relationship between increased presence of Streptococcus mutans and recurrent oral ulcer which may lead to the conclusion that Streptococcus mutans may be involved in the disease process of recurrent oral ulcer.

KEYWORDS: recurrent oral ulcer, streptococcus mutans, saliva