

Original Article

Evaluation the relationship between psychological profile and salivary cortisol in patients with recurrent aphthous stomatitis

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ABSTRACT

Background: Recurrent aphthous stomatitis (RAS) is one of the most common oral mucosal diseases which are diagnosed with recurrent and painful ulcers. The possible association between psychological factors and salivary stress related factors in patients with aphthous ulcers has been discussed in various studies. The aim of this study was to evaluate salivary cortisol level, anxiety, and depression in patients with RAS.

Materials and Methods: In this case control study, 30 patients with RAS and 30 healthy individuals were enrolled by matching their age and sex. Anxiety and depression were assessed by beck anxiety inventory and beck depression inventory. Unstimulated saliva of both groups were collected and then tested by DiaMetra kit and the ELISA method. Data were analyzed by SPSS using an Independent *t*-test and Mann–Whitney test. A statistical significance level of <0.05 was considered.

Results: The mean salivary cortisol in the case group was 5.35 ng/ml and in the control group was 4.73 ng/ml which was not statistically significant ($P > 0.05$). There was no significant difference in anxiety and depression level between the two groups ($P > 0.05$). According to Spearman correlation coefficient, there was an average, negative, and significant correlation between salivary cortisol and anxiety and depression scores in the case group ($P < 0.05$).

Conclusion: This study shows that, although the mean salivary cortisol was slightly higher in patients with aphthous lesions, anxiety, and depression were not possible factors for RAS. There was a moderate, negative correlation between salivary cortisol level and stress and anxiety in patients with RAS.

Key Words: Anxiety, aphthous, cortisol, depression, saliva, stomatitis

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INTRODUCTION

Recurrent aphthous stomatitis (RAS) is one of the most common oral mucosal diseases with a prevalence of 5%–66%^[1-4] and the most common nontraumatic agent of recurrent oral ulcers.^[5,6] These lesions are commonly occurring on nonkeratinized mucosa such

as labial and buccal mucosa, ventral surface of the tongue, floor of the mouth, and soft palate. They are characterized as one or more round or oval painful ulcers with erythematous halo.^[7,8]

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