An Investigation on the Levels of Vascular Endothelial Growth Factor (VEGF) in the Unstimulated Whole Saliva of Patients with Recurrent Aphthous Stomatitis

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Abstract:

Statement of Problem: Recurrent aphthous stomatitis (RAS) is one of the most common inflammatory diseases encountered in dental practice, but the precise etiology and pathogenesis of the disease is not fully understood. Vascular endothelial growth factor (VEGF) is a multifunctional angiogenic cytokine involved in angiogenesis and wound healing. There is evidence that VEGF could play an important role in recruiting inflammatory infiltrates like those in RAS. Purpose: The aim of this study was to investigate salivary levels of VEGF in various stages of RAS. Materials and Methods: In a case/crossover study, salivary VEGF levels were determined in 31 patients with RAS. Their saliva was collected by the spitting method in specially prepared tubes in two stages; the active phase (first week) and the remission phase. Salivary levels were then determined using the Sandwich ELISA technique and the data were analyzed by the Wilcoxon test. Results: Patients in the remission period had increased VEGF values, 571.774 (347.5499) pq/ml, as compared to the acute stage, 424.758 (235.1474), and the difference was significant (P< 0.05). Conclusion: Salivary VEGF levels seem to be associated with ulcer development in RAS, supporting the concept of a potential association between RAS and VEGF.

Keywords:

VEGF ، Recurrent Aphtous Stomatitis (RAS)

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