

## عنوان مقاله:

Salivary VEGF-R<sup>3</sup>, TNF- $\alpha$ , TGF- $\beta$  and IL-1 $\gamma$ /F Levels in Patients with Minor Aphthous

## محل انتشار:

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## خلاصه مقاله:

Background : Recurrent aphthous stomatitis (RAS) is one of the most common mucosal ulcerative of oral cavity. Role of immune system, especially cytokines in immunopathogenesis of aphthous stomatitis was not highly considered. The aim of this study was to evaluate the levels of salivary cytokines, including VEGF-R<sup>3</sup>, TGF- $\beta$ , TNF- $\alpha$ , and IL-1 $\gamma$ /F in patients with RAS in two clinical stages, ulcerative and healing period. Material and Methods: In this case –control study, 18 patients with RAS (case group) and 18 healthy individuals (control groups) who were matched for age and sex, were selected. In both ulcerative and healing stages, unstimulated saliva of patients with RAS and healthy controls were collected. Levels of salivary cytokines, including VEGF-R<sup>3</sup>, TGF- $\beta$ , TNF- $\alpha$ , and IL-1 $\gamma$ /F at each stage was determined by ELISA procedure and result were compared with the control group. Results: The levels of salivary VEGF-R<sup>3</sup> in the ulcerative ( $5.92 \pm 1.87$  ng/ml) and healing ( $7.14 \pm 3.1$  ng/ml) stages significantly decreased comparing with control group ( $9.71 \pm 2.24$  ng/ml). Moreover, the level of salivary TGF- $\beta$  in ulcerative ( $142.21 \pm 18.7$  pg/ml) and healing ( $167.02 \pm 28.1$  pg/ml) stages significantly reduced comparing with control group ( $178.35 \pm 55.67$  pg/ml). In addition, our finding showed that both inflammatory cytokines including TNF- $\alpha$  and IL-1 $\gamma$  A/F significantly increased comparing to control group. The level of salivary TNF- $\alpha$  in ulcerative ( $34.9 \pm 11.35$  pg/ml) and healing ( $28.09 \pm 9.07$  pg/ml) stages significantly increased comparing with control group ( $10.76 \pm 1.83$  pg/ml). Also, the IL-1 $\gamma$  A/F level in the ulcerative ( $96.44 \pm 25.74$  pg/ml) and healing ( $79.17 \pm 24.96$  pg/ml) stages significantly increased comparing to the control group ( $53.47 \pm 13$  pg/ml). Conclusion: Our finding in this study showed that the reduction of VEGF-R<sup>3</sup> and TGF- $\beta$  cytokines and increasing of inflammatory cytokines such as

. TNF- $\alpha$  and IL- $\nu$  A/F are effective in the pathogenesis of minor aphthous particularly in ulcerative stage

## کلمات کلیدی:

.IL- $\nu$ A/F, Minor Aphthous, TGF- $\beta$ <sub>1</sub>, TNF $\alpha$ , Saliva, VEGF-R $\nu$

## لینک ثابت مقاله در پایگاه سیویلیکا:

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