Salivary lipid peroxidation in patients with oral lichen planus

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Abstract

Background: Oral Lichen Planus (OLP) is an inflammatory condition with unknown etiology. Reactive oxygen species (ROS) and free radicals may play an important role in the pathogenesis of this disease.

Objective: The aim of this study was to compare salivary lipid peroxidation in patients with oral lichen planus with healthy subjects.

Methods: This case-control study was conducted in Zahedan School of Dentistry during 2014-15. Unstimulated saliva samples were collected from 30 patients with OLP and 30 age and gender-matched healthy controls and were transferred to the laboratory. Salivary lipid peroxidation products were measured using TBARS (thiobarbituric acid reactive substance) method. Data were analyzed using Mann-Whitney U test.

Findings: Salivary lipid peroxidation in patients with OLP was significantly higher than healthy controls (1.57±0.63 µM vs. 1.2±0.77µM). Mean Salivary lipid peroxidation in women with OLP was significantly higher than healthy women (1.67±0.67 µM vs. 1.16±0.82 µM).

Conclusion: With regards to the results, it seems that lipid peroxidation in patients with OLP is higher than healthy subjects.

Keywords: Oral Lichen Planus, Lipid Peroxidation, Saliva