

***Assessment of Salivary and Serum Lipid
Peroxidation/Antioxidant Status and C - Reactive
Protein Marker in Patients with Recurrent
Apthous Stomatitis (RAS) in Selected Sample in
Baghdad City.***

A Thesis

Submitted to the Council of the College of Dentistry,

University of Baghdad

In Partial Fulfillment of the Requirements

For the Degree of Master of Science

In Oral Medicine

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2012 AD

1433 AH

Abstract

Background:

Recurrent aphthous stomatitis (RAS) characterized by recurrent episodes of oral ulcers, typically from childhood or adolescence which are round or ovoid ulcers with circumscribed margin, erythematous halo and yellow or gray floor. It represents a major widely distributed health problem accounts for 10-25% among general population; and oxidative stress presumably contributes to its pathogenesis.

Oxidative stress can arise through the increased production of reactive oxygen species (ROS) and/or because of a deficiency of antioxidant defenses.

Aims of the study:

This study had been designed for assessment and detection of salivary and serum lipid peroxidation bio-marker Malondialdehyde (MDA) and the level of antioxidants: total glutathione (GSH), Uric Acid and C-reactive protein (CRP) marker in a selected sample of Iraqi patients complaining of RAS in comparison with healthy controls.

Subjects, Materials and Methods:

Fifty patients with (RAS) and fifty sex and age-matched healthy controls, aged (15-58) years were enrolled in this study.

Results:

The current study shows that in RAS group there is a marked elevation of MDA in serum and saliva with depletion of total GSH, while there is significant elevation of salivary uric acid, (although serum uric acid level failed to reach statistical significant level). Furthermore, in fifty patients, there were thirteen patients (26%) appear to significantly express CRP positive in serum and saliva.

Conclusions:

The results of this study revealed that increased lipid peroxidation and the inadequacy of the antioxidant defense system seem to play a crucial role in the pathogenesis of RAS in selected Iraqi samples. Saliva can be used as a valid and convenient diagnostic biofluid for measurement of the oxidative stress in patients with RAS.