

Salivary and Serum Oxidant/Antioxidant Status and C-Reactive Protein Marker in Patients with Recurrent Aphthous Stomatitis (RAS) in Selected Sample of Baghdad City.

Noor H. Mohammad* and Rafil Hameed Rasheed**

ABSTRACT

Recurrent aphthous stomatitis (RAS) 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. This study had been designed for assessment and detection of salivary and serum lipid peroxidation bio-marker Malonedialdehyde (MDA) and the level of antioxidants: [total glutathione (GSH), Uric Acid (UA)] and C-Reactive protein (CRP) marker in a selected sample of Iraqi patients complaining from RAS in comparison with healthy controls. Fifty patients with (RAS) and fifty sex and age-matched healthy controls, aged (15-58) years were enrolled in this study. 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 a significant elevation of salivary UA (although serum UA 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.

The results of this study revealed that increased lipid peroxidation and the inadequacy of the 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.

*M.Sc. Oral Medicine, University of Baghdad, College of Dentistry, Iraq

** Professor, Dean of College of Dentistry, University of Al-Anbar, Iraq