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## The Status of Oxidants and Antioxidants in the Neutrophils of Patients with Recurrent Aphthous Stomatitis

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**Abstract:** Recurrent aphthous stomatitis (RAS) is an inflammatory condition of unknown etiology. The exact role of the leukocytes in the pathogenesis of RAS is not known. The aim of this study was to evaluate the status of the oxidative system in neutrophils of RAS patients. A total of 26 patients and 22 sex and age matched healthy control subjects were analyzed by measuring intracellular oxidant/antioxidant enzymes and related parameters; myeloperoxidase (MPO), xanthine oxidase (XO), catalase (CAT), superoxide dismutase (SOD), adenosine deaminase (AD), malondialdehyde (MDA) and nitric oxide (NO). Statistically significant increases in the activities of SOD, CAT and levels of MDA, NO were detected in the neutrophils of patients. There was no significant difference in MPO, AD and XO activities of neutrophils. Although the functions of neutrophils were normal, there may be an oxidative stress affecting neutrophils in RAS.

**Key Words:** Recurrent aphthous stomatitis, neutrophils, oxidative system

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