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Evaluation of oxidant/antioxidant status and ECP levels in asthma

Ömer EMECEN¹, Berrin BERÇİK İNAL¹, Füsun ERDENEN², Murat USTA¹, Hale ARAL¹, Güvenç GÜVENEN¹

 ¹ Department of Clinical Biochemistry, Ministry of Health İstanbul Education and Research Hospital, İstanbul - TURKEY
² Department of Internal Medicine, İstanbul - TURKEY

Abstract: Inflammatory and immune cells, such as eosinophils, macrophages, and neutrophils, generate more reactive oxygen species in patients with asthma than they do in healthy individuals, and oxygen radicals contribute to tissue injury in asthma. We aimed to measure total oxidant status (TOS) and antioxidant status (TAS) in order to assess oxidative and antioxidative capacity. Eosinophil cationic protein (ECP), total IgE, and eosinophils (%) were measured to evaluate the level of inflammation. Materials and methods: The study included 56 non-smoking asthma patients that were followed-up at the respiratory disease and allergy outpatient clinics, where they received ongoing treatment for 5 months (May 2008-October 2008). Patients with malignancy or chronic diseases, such as DM, chronic renal disease, and rheumatoid arthritis, were