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## Total Eosinophyls, ECP and IL-5 in Peripheral Blood During Treatment with Inhaled Cortikosteroids in Patients with Asthma

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**Objectives:** The main attribute of asthma is inflammation, which leads to airway remodeling, bronchial hyper-reactivity and reversible or partly reversible airway obstruction. According to GINA, asthma is a chronic inflammatory disorder of the airways in which many cells play a role, in particular mast cells, eosinophils (Eo), and T lymphocytes (GINA). Many cells and mediators take part in creating the asthmatic inflammatory reaction, but eosinophils play a central role.

**Methods:** This study includes 30 patients of the Pulmology and Allergy Clinic, Skopje, with confirmed bronchial asthma, treated with ICS. In all of the patients we followed Eo count, ECP and IL-5 in peripheral blood at the beginning of the study, after 2 and 6 months treatment.

**Results:** At the beginning of the study in all 30 (100 percent) of the patients the serum level of IL-5, Eo count and ECP were increased. Following the parameters during treatment with ICS we registered statistical significant changes in all of the tested parameters.

**Conclusion:** Our conclusion is that the ICS objectively suppress the inflammatory reaction in asthma and the biologic markers (IL-5, Eo and ECP), which we have followed, can measure the accomplished effect. They could be used in every day practice, not only as diagnostic parameters but also as valid therapeutic guides in the treatment of asthma.

Keywords: Asthma, treatment, Eo count, IL-5, ECP