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Introduction

Asthma is a chronic inflammatory disorder of the air ways in which many cells and cellular elements play a role in particular mast cells eosinophils and T lymphocytes in susceptible individuals the inflammation causes recurrent episodes of wheezing, breathlessness, chest tightness and cough particularly at nigh and/or early morning ***(Bousquet et al., 2000).***

In all forms of asthma eosinophils play a control role in inflammatory response. Through their capacity to secrete a wide range of preformed and newly generated mediators that act on the airways both directly and indirectly through neural mechanisms ***(Jacoby et al., 2001).***

Clinicians have long recognized an association of sputum and blood eosinophilia with asthma ***(Reed, 1993).***

Science in many countries of the world parasitic diseases are endemic, thus blood and sputum eosinophilia are of limited value ***(Jacoby et al., 2001).***

Recent studies have indicated that assessment of eosinophil derived proteins in various body fluids could be used for monitoring disease activity in childhood asthma ***(Koller et al., 1999).***

The eosinophilic cationic protein (ECP) is one of the granule proteins in eosinophilic granulocytes which is highly cytotoxic. Release of this protein may reflect the activity state of eosinophilic granulocytes in diseased subjects ***(Pronk et al., 2001).*** The concentration of ECP in the brochoalveolar lavage fluid (BALF) of asthma patients vary with the severity of their disease. The concentration of serum ECP has recently been found to correlate with ECP concentration in the bronchial wash and BALF, therefore, assessment of serum ECP may be assumed to reflect pulmonary inflammation in bronchial asthma ***(Venge, 1993).***

AIM OF THE WORK

The aim of the present work is to study the level of eosiophilic cationic proteins in serum of asthmatic children during excerption of asthma and correlating their level to severity and disease activity.