

عنوان مقاله:

Evaluation of Serum Levels of Calprotectin in Asthmatic Children

محل انتشار:

مجله بین المللی کودکان، دوره 7، شماره 9 (سال: 1398)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Abdelhakeem Abdel Mohsen - Associate Professor of Pediatrics, Departments of Pediatrics, El-Minia University, Mina, Egypt

Ahmed Abdelfadel - Associate Professor of Clinical Pathology, Department of Clinical Pathology, El-Minia University, Mina, Egypt

خلاصه مقاله:

Background Calprotectin is a cytosolic protein that belongs to the S-100 protein group with immunomodulatory and antiproliferative actions. The level of this protein increases in infection, inflammation, and malignancy. The aim of this study was to evaluate the level of calprotectin in asthmatic children as indicator of asthma severity. **Materials and Methods** This is a prospective study that included forty-five children with bronchial asthma and admitted to pediatric department, Minia University Children's Hospital, Egypt, they were (15 intermittent asthma, 15 mild persistent asthma and 15 moderate persistent asthma), and 20 apparently healthy children were included in the study and subjected to thorough history taking, full clinical examination, lung function test, CBC, Immunoglobulin E and measurement of serum levels of calprotectin using ELISA. **Results** The study revealed a statistically significant increase in the level of calprotectin in asthmatic children compared to that of the control group ($p<0.000$). Also, there was a significant increased level of calprotectin in children with persistent asthma compared to those with mild intermittent asthma and control group ($p<0.001$). In addition, there was a positive correlation between serum level of calprotectin and eosinophil count ($r=0.83$, $p=0.001$), and negative correlation with lung functions (FEV1 and PEEF) ($r=-0.89$ and $r=-0.88$, respectively, $p<0.05$). **Conclusion** Increased levels of calprotectin in asthmatic children suggest that it may play a role in asthma, also it was associated with poor lung functions suggesting that there is a close relation between calprotectin level and the severity of childhood asthma.

کلمات کلیدی:

Asthma, calprotectin, Children, Immunoglobulin E, Pulmonary functions tests

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/940035>

