

## Relationship between Serum Level of Endocan and Severity of Childhood Asthma

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Endocan is an endothelial cell-associated proteoglycan that is preferentially expressed by renal and pulmonary endothelium. It reflects endothelial activation and dysfunction, this study aimed to investigate the role of Endocan in bronchial asthma and correlate their levels with the severity of asthma. Sixty children with mild and moderate asthma and 20 healthy controls were included in the study and subjected to full clinical examination, Anthropometric measurements, pulmonary function test, CBC and assay of serum level of Endocan using ELISA. A high significant increase in serum level of Endocan was found in all asthmatic children compared with the controls. Significant higher levels were also found in mild and moderate persistent asthma as compared to controls. In all asthmatic children, there was significant positive correlation between serum level of Endocan and PBE count and negative correlation with FEV1 and PEF, and insignificant correlation with serum IgE level. In conclusion; high Endocan level is associated with poor lung functions and severity of asthma. Further studies are needed to validate these data.