

SUMMARY AND CONCLUSION

Bronchial asthma is the most common cause of chronic respiratory illness among children all over the world. Despite advances in treatment, hospitalization rates for childhood asthma have increased dramatically in recent years, particularly among preschool children. Theories to explain the pathogenesis of bronchial asthma has gone through several changes. Much attention has been paid recently to the inflammatory infiltrate within the airways of patients with asthma substantial evidence accumulated in recent years has implicated various cytokines in orchestrating and perpetuating the airway inflammatory response in asthma a part from potentially producing the above proinflammatory effects in asthmatic airways, specific cytokines notably IL-1.

In this study, we assessed the usefulness of measuring the serum level of IL-1 and C3 as a serological marker to detect the severity of asthma the study was conducted on 40 asthmatic children during acute asthma and after treatment aged from 2-8 years presented to out patient clinic of Alexandria El-Ramal Children Hospital as well as 20 apparently normal children of matched age and sex.

In the present study, serum IL-1 were significantly higher in asthmatic patients than in the control and after treatment.

This support the theoretical view of the proinflammatory IL-1 cytokines in the pathogenesis of asthma.

Complement may be of importance in the pathogenesis of bronchial asthma, and this supports the notion that bronchial asthma is not a mere IgE dependent process but the result of a general airway inflammation.

The results in this study showed that there is significant elevation of the mean C3 during acute attack of asthma.

The rise in complement might be attributed to an acute phase phenomenon which occurs in various inflammatory diseases, while increased complement consumption in some children of asthma is most probably a primary phenomenon due to direct complement activation by allergen and not secondary to IgE mediated Ag-Ab reaction. This increased in complement consumption might be involved in precipitating and / or exacerbating the attack of asthma.