SUMMARY & CONCLUSION

During the past decade, mortality due to asthma in children had increased. Hospitalization rates for children before age of 17 have rosen by 4.5% per year despite our expanding knowledge about the pathophysiology of asthma and emphasis on the usage of anti inflammatory medications (Duff et al., 1993).

Omar, (1979) reported that the prevalence of asthma reaching 6.6% among children in Alexandria.

Our study is depending on the changes of some enzymes (CK, CKMB, LDH, SGOT & SGPT) and electrolytes (Na, K, Ca & P) that may occur with asthmatic attacks in childhood according to the severity of this attack before any treatment or medications.

The study included 60 children (age ranged from 3 to 15 years) suffering from asthmatic attack, and divided according to the history, clinical picture and level of peak flow rate (PEFR) into three groups (20 patients for each). Also, there was 10 healthy children included in this study were taken as controls (age ranged from 3 to 14 years).

E.C.G was done for all cooperative subjects (53 from 60 children & 8 from 10 of control subjects). From the results we noticed that there were marked E.C.G abnormalities (denoting

myocardial ischaemia) in 5 cases of the severe group (25% of severe group) which associated with marked increase of serum level of CK-MB (More than 6% of total CK level and also more than 2 U/L) in same cases that considered as another prove of cardiac toxicity which occur as a result of severe cardiac hypoxia in severe asthmatic attacks. We also noticed that there were significantly increasing of serum enzymes (SGOT, SGPT, CK and LDH) with the increasing of severity of asthmatic attacks in children as a result of tissue anoxia (liver, heart and other tissues) which raised with the increasing of severity of asthmatic attack. Without any significant changes of serum electrolytes (Na, K, Ca and P) inspite of increasing of severity of asthmatic attacks.