Summary

Mycoplasma pneumoniae (M.pneumoniae) infection has been implicated as a possible mechanism leading to or exacerbating underling chronic pulmonary diseases as bronchial asthma. It play a role in the pathogenesis of asthma beyond simple and acute exacerbation as it can be detected by PCR and or culture more often from the airways of patients with chronic, stable asthma than from matched control patients.**(Marc et al.,2000).**

In present study we aimed to study the association between childhood asthma and M. pneumoniae infection.

The study was conducted on 80 simple randomly selected children, aged above 5 years to 12 years, 60 patients suffering from bronchial asthma and 20 healthy age and sex matched children taken as a control group. From the 60 asthmatic patients 40 were in asthma exacerbation and 20 were in between the attacks. The study was conducted atchildren department of Benha University Children Hospital over a 6 months period.

All children included in this study were subjected to complete history, clinical examination and Laboratory investigation. Detection of M.P by IgM and IgG methods were done and also P.C.R for M.P antigen was performed.

We had the following results:

- No significant difference between patients and control as regard age, sex and residence distribution.
- Family history of atopy was significant more in asthmatic than control.
- There was a significant increase between patients and control as regard leucocytic and eosinophilic count and a significant decrease as regard Hb level.
- 5 asthmatic children (8.3%) had (+ve) M.P IgM denoting recent infection and they all were (+ve) P.C.R.

- 29 of asthmatic children showed (+ve) M.P IgG denoting old or previous infection.

- From the 10 selected cases for P.C.R 80% were positive and 20% were negative

- Asthma exacerbation was present in 40 patients, 5 of them showed the recent M.P infection (12.5%).

- No significant difference between (+ve) and (-ve) IgM and IgG patients as regard the age, sex residence and eosinophilic count.

- There was significant decreases between (+ve) and (-ve) IgM and IgG patients as regard Hb levels.

We concluded that acute M.P infection may be a trigger for asthma exacerbation. Old or previous M.P infection may contribute to the asthma development.

We recommended further studies to evaluate the role of M.P infection on the Pathophtsiology of asthma chronic airway inflammation and hyperresponsiveness.