SUMMARY AND CONCLUSION

Much controversy existed about the effect relationship of chronic tonsillitis, with or without adenoind hypertrophy, and bronchial asthma.

In the past, it has been stated that "The removal of tonsils and adenoid in a child with untreated nasal allergies may be followed by the development of bronchial allergic symptoms ***(Howard, 1972)***. ***Linna (1985)*** as well as ***Anderson et al. (1987)*** considered tonsillectomy or adenotonsillectomy as a risk factor for asthma based on different questionnair studies.

On the other had, ***Janet et al. (1994)*** detected no increased prevalence in the development of asthma following adenotonsillectomy in the allergic children.

This study was conducted on a sample of Egyptian children with adenotonsillar disease to through light on the effect of tonsillectomy with or without adenoidectomy, on bronchial hyper-responsiveness and bronchial asthma.

This study was carried on 63 patients, their ages ranged from 7 to 14 years, randomly selected from those attending the E.N.T. Outpatient Clinic of Banha University Hospital during the period from May 1994 to June 1996.

Every patient was subjected to thorough history taking, clinical examination including otolaryngological examination, routine pre-operative laboratory investigations and radiological investigation of chest and nasopharynx.

All patients were evaluated pre- and two months post - operatively as regarding; (1) ventilatory function test, (2) methacholine bronchoprovocation challenge test, (3) serum immunoglobulin E (IgE) and (4) the peripheral blood eosinophilic count /mm^3.

The patients were pre-operatively classified into three groups; group I included 23 patients with no bronchial hyperreactivity, group II included 21 patients with asymptomatic bronchial hyperreactivity, and group III included 19 asthmatic patients.

In group I, there was non significant change in the results of ventilatory function test, methacholine bronchoprovocation challenge test, serum immunoglobulin E (IgE) and peripheral blood eosinophilic count.

In group II, there was a significant decrease in the bronchial hyperreactivity, the IgE and the peripheral blood eosinophilic count. This significant decrease in bronchial hyperreactivity was associated with significant increase in all parameters of the ventilatory function test except for the FEV_1/FVC%.

In group III, There was a significant decrease in the bronchial hyperreactivity, the IgE and the peripheral blood eosinophilic count. The decrease in bronchial hyperreactivity was associated with significant increase in all parameters of the ventilatory function test results except for the FVC.

To our knowledge, the present study is the first to introduce objective evidence for the value of tonsillectomy or adenotonsillectomy

in decreasing the bronchial hyperreactivity in both asymptomatic bronchial hyperreactive patients and asthmatic patients.

Conclusion :

From this study we can conclude that tonsillectomy and/or adenoidectomy has no adverse effects on allergic children. The surgery decreases the bronchial hyper-responsiveness in asymptomatic bronchial hyperreactive patients and so decreases the risk of future asthma. Also, tonsillectomy and/or adenoidectomy decrease the bronchial hyper-responsiveness in asthmatic patients. Thus, the risk of frequent recurrent attacks, severity of asthma and the dose of medical treatment will expectedly decrease.