

# INTRODUCTION AND AIM OF THE WORK

The upper respiratory tract (Nose and paranasal passages) and lower respiratory tract (tracheo-bronchial tree and alveoli) are closely related, not only anatomically but also in a number of physiological functions and responses to the environment.

Bronchial asthma is a major health problem of increasing mortality and morbidity over the last decade (*Burney et al., 1990*).

There is great controversy concerning the role of adenotonsillar disease in bronchial asthma and the value of adenotonsillectomy in such conditions.

In the past it has been stated that “the removal of tonsils and adenoids in a child with untreated nasal allergies may be followed by the development of bronchial allergic symptoms” (*Howard, 1972*). *Anderson et al. (1987)*, considered tonsillectomy and/or adenoidectomy are risk factors for asthma up to 16 years of age.

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

So, there is a need for objective longitudinal studies to be performed to characterise the temporal relation between bronchial asthma and adenotonsillar disease.

Measurement of bronchial hyper-reactivity is a practical objective method for assessing the abnormality of the airways and the possibility of developing asthma (*Fishman, 1988*).