بررسی مقایسه ای ویژگیهای بالینی و پاراکلینیکی بیماران مبتلا به آسم برونشیال ساده با آسم برونشیال به همراه رینوسینوزیت در بیماران مراجعه کننده به بیمارستان امام خمینی اردبیل از اول آذرماه ۱۳۸۲ تا آخر خرداد ۱۳۸۷

Comparisonal Evalulation of Clinical and paraclinical characteristics of Bronchial Asthma with Asthma and Rhinosinustis.

## Abstract

**Background:** Asthma is the chronic inflammatory disease of lower airway that manifesting clinically as cough, dyspnea and wheeze. According to studies, asthma is frequently associated with rhinosinusitis and r/s can be a predisposing and exacerbating factor for asthma.

Regarding the direct role of R/S in Severity and control of asthma, we decided to assess and compare clinical and paraclinical characteristics of asthma base on the presence or absence of r/s in patients.

**Methods and Materials:** This cross sectional study was done from 1 Azar 1386 to 31 Tir 1387 on asthmatic Patients that refer to Ardabil Imam khomeini Hospital.

90 asthmatic patients were contributed in this study. The patients information consist of: 1. The severity of asthma symptoms and r/s history 2. Clinical findings (respiratory status, cyanosis and paradoxical pulse) 3.

Paraclinic findings (CXR, PNS – XR, spirometry, WBC count and eosinophilia).

In this study, comorbidity of asthma and r/s and influence of r/s on severity of asthma was evaluated.

The data of patients were analyzed utilizing SPSS Soft ware and T- test and chi-Squares.

**Results:** Among 90 asthmatic patients, 66 (73%) patients had evidencs of R/S. 40 (60%) patients had the history of sinonasal symptoms. The most common symptom was nasal congestion (39.4%) and on PNS- XR the most common involved sinus was bilateral maxillary sinus (72. 7%) There was no meaningful difference in severity of symptoms between asthmatic patients with and without r/s , but most of asthmatic patients with r/s had moderate persistent symptoms and most of patients without r/s had mild intermittent and mild persistent symptoms. There was meaningful difference between asthmatics without r/s versus 70.52, P < 0.05). In comparing the staging of asthma, the most of asthmatics with r/s were in Stage 3 (42.4%) but the most of patients without r/s were in stage 1 (%48.7) that was meaningful difference. (p= 0.002) In addition to, using of pharmacologic therapy, oral and injectional steroid, history of admission in hospital, signs of severe disease (Cyanosis and paradoxical pulse) in asthmatics with r/s were more than in patients without r/s.

There was no meaningful difference in WBC count and eosinophilia in two groups of patients.

**Conclusion:** Rhinosinusitis is frequently comorbid with asthma that may contribute to more severity and poor control of asthma and affect asthmatic severity as measured by lung function test.

Key words: Asthma, Rhinosinusitis, clinical, paraclinical