

EFFECT OF AERODYNAMIC FEATURES OF THE UPPER RESPIRATORY TRACT ON PERIPHERAL AIRWAY REACTIVITY AND FORCE OF RESPIRATORY MUSCLES IN PATIENTS WITH SEVERE BRONCHIAL ASTHMA

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Summary. Studied 60 patients (27 men and 33 women aged from 24 to 83 years) with severe asthma ($FEV_1 - 56,4 \pm 2,0\%$). 76,6% of patients complained on difficulty in nasal breathing. 22 (36,7%) of them were diagnosed with allergic rhinitis and 24 (40,0%) – vasomotor rhinitis. Chronic rhinitis in 18 (30,0%) patients was combined with the curvature of the nasal septum. Chronic polypoid gajmoroetmoidit detected in 4 (6,7%) patients. Asthma Control Test (ACT) was $16,3 \pm 0,9$ points, the average duration of disease – $16,8 \pm 1,9$ years.

The studies proved the existence of patients with severe asthma and expressed nasobronchial bronchonasal reflex. In this vicious circle as shortness of breath supported bronchoobstructive nasal syndrome, so did prolonged bronchial obstruction cause aerodynamic upper respiratory tract disorders. It was proven that the aerodynamic features of the upper respiratory tract affect the reactivity of peripheral airways. Therefore, the most frequently diagnosed pathology of upper respiratory tract (allergic rhinitis, vasomotor rhinitis, polypoid ethmoiditis, crooked nasal septum) should be treated parallel with the treatment of asthma.

Key words: *upper respiratory tract, peripheral airways, bronchial asthma.*