SPIROMETRY AND FLOW-VOLUME RESEARCH CONCERNING PATIENTS WITH DIAGNOSED GASTROESOPHAGEAL REFLUX DISEASE

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Introduction: Gastroesophageal reflux disease (GERD) is one of the most common digestive diseases more and more often diagnosed in clinical office. GERD usually runs as a set of symptoms: chest pain, heartburn, sore throat, hoarseness, dental erosion and paroxysmal cough. This chronic, paroxysmal cough can be easily taken as an symptom of asthma. One method of diagnosis of this disease is to perform respiratory function tests, especially the flow-volume. It enables a diagnosis of disorders of ventilation, obstruction and restriction. Chronic inflammation of respiratory tract has the chemical character and is caused by stomach acid affecting the esophagus, larynx and respiratory tracts, sometimes causing the bronchial hyper-reactivity. Some of clinicians distinguish the new type of asthma – the reflux asthma. **Aim:** The aim of this study is to compare the respiratory functions of GERD-diagnosed patients with a suspected asthma to the healthy people. **Material and methods:** We studied 20 subjects (9 women and 11 men) at the age from 11 to 68, with diagnosed GERD, referred to the Lung Disease Center with suspected asthma. Control was statistically similar group of 20 healthy subjects. All patients have been tested with spirometer Lungtest 500 from MES (spirometry and flow-volume). Results were compared with the standards and statistically analyzed: the normality of distribution was tested by Shapiro-Wilk test, next all parameters with normal distribution were analyzed with t-student test, these non-parametric with Mann-Whitney test. **Results:** The result of spirometry and flow-volume in all cases had no abnormalities characteristic for asthma. Comparing to the control group the statistically significant difference was observed in parameters: FVC EX (8%), FEV1 (13%), MEF 50 (32%), MEF 25% (48%). Conclusion: The studied group of patients with diagnosed gastroesophageal reflux disease did not show any significant disturbances of ventilation, which could lead asthma diagnosis, even concerning the observed chronic cough. Significantly lower test results in parameters: FVC EX, FEV1, MEF 50, MEF 25% can indicate the slight inflammation in respiratory tract in patients suffering from GERD.