

ARRHYTHMIAS IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Introduction: Cardiac supraventricular and ventricular arrhythmias are common in chronic obstructive pulmonary disease (COPD), especially in acute exacerbations. Hypoxemia and cardiac autonomic dysfunction which are present in COPD are important in the development.

Aim: To estimate the prevalence and types of arrhythmias in stable COPD and their correlation with the severity of the disease.

Material & Methods: Cross-sectional study was conducted in period of two years in 70 patients with stable COPD diagnosed according to GOLD's criteria (Global Initiative for Obstructive Lung Disease). Pulmonary investigation (spirometry, gas analysis, chest X-ray) and 24 hours holter monitoring with Schiller ECG Holter Recorder was performed in all subjects.

Results: The most common were atrial pair and atrial premature beats in 49 (70%), a trial run in 21 (30%), ventricular premature beats 28 (40%), ventricular couplets 7 (10%), atrial fibrillation in 14 (20%) in COPD patients. Supraventricular arrhythmias were more frequent as increasing COPD severity: 30%, 50%, 60%, 70% in GOLD 1,2,3,4, respectively. With chi-square test we concluded that frequency of ventricular arrhythmias did not correlate with the severity of the disease and they were detected in 28 (40%) of the patients. Patients in respiratory acidosis with pH<7.35 had more ventricular disturbances than those with pH 7.35-7.45.

Conclusion: 24-hour Holter monitoring enhances the possibility of observing cardiac rhythm and detection of arrhythmias in asymptomatic patients with COPD.

BIOGRAPHY

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