

CARDIAC ARRHYTHMIAS IN PATIENTS WITH EXACERBATION OF COPD.

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Background: Supraventricular and ventricular arrhythmias are common among patients with chronic obstructive pulmonary disease (COPD). Multiple factors can contribute to the development of arrhythmias in patients with exacerbation of the disease, including: respiratory failure, medications, hypertension, coronary heart disease and heart failure. **Objectives:** To assess the prevalence of cardiac arrhythmias and risk factors among patients with exacerbation of COPD. **Materials and methods:** A retrospective analysis of 2753 24-hour Holter recordings of patients hospitalized in the Internal Medicine Ward, Medical University of Warsaw in 2004-2016 was conducted. In 152 cases the exacerbation of COPD was diagnosed. **Results:** The prevalence of all arrhythmias was 97%. The commonest arrhythmia was ventricular premature beats (VPB) - 88.8%, then supraventricular premature beats (SPB) - 56.5%. Permanent atrial fibrillation accounted for 30.3% and paroxysmal atrial fibrillation (PAF) for 12.5%. Supraventricular tachycardia (SVT) was noted in 34.2% patients and ventricular tachycardia in 25.6%. Respiratory failure increased the risk of SPB while heart failure increased the risk of VPB. Treatment with theophylline was associated with higher proportion of PAF and SVT. **Conclusions:** The exacerbation of COPD is associated with high prevalence of cardiac arrhythmias. The comorbidities and even treatment increase the risk of dangerous arrhythmias.