

Patients and methods:

To examine the role of circulating immune complexes (CIC) in infective endocarditis, we studied 51 patients with infective endocarditis (IE) for the presence of CIC, from the Institute of Cardiology from Chisinau, the Republic of Moldova. We have used ELISA method, as the elective method to identify the level of CIC. We also included in this study, the clinical examination of the patients both with normal and high levels of CIC.

Results: We identified 42 patients with a high-level of CIC and 9 patients with a normal value of CIC. Among the patients with high-level of CIC 35 (83.3%) had subacute endocarditis (SBE), and 7 (16.7%) had acute infective endocarditis (AIE). Systemic deposition of immune complexes results in the vasculitic lesions classically associated with IE: so 8 (19.04%) had peripheral lesions (Osler's nodes, petechiae, splinter hemorrhages et.al), and 31 (80.96%) had severe immunological manifestations such as: glomerulonephritis, mycotic aneurysms et.al.

Conclusion: These findings support the hypothesis that CIC may be important in the pathogenesis of peripheral and immunological lesions in infective endocarditis.

Key words: circulating immune complexes, infective endocarditis, clinical manifestations.

THE COURSE OF CORONARY HEART DISEASE AT DIFFERENT OXYGEN SATURATION

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Introduction: In industrialized countries, as well as in Ukraine, coronary heart disease (CHD) is one of the most common diseases, which ranks first place among causes of death. Equally important is the problem of chronic obstructive pulmonary diseases (COPD), which is the fourth most significant cause of death among Ukrainian population. The simultaneous presence of COPD and coronary artery disease leads to a syndrome of "mutual burden."

Aims: The aim of our research is to study CHD flow rate depending on the saturation of oxygen.

Methods and results: We examined 20 male patients aged from 47 to 72 years with coronary heart disease with postinfarction atherosclerosis. The first group consisted of 12 patients with CHD without concomitant pulmonary disease, the second group - 8 patients with coronary heart disease with concomitant COPD. The level of oxygen saturation has been measured by pulse oximeter "UTAS oxy-201." In the first group, the average blood oxygen saturation is $97 \pm 0,18$, and patients of the second group - $93 \pm 0,39\%$. Among patients of the second group the majority of men was smokers and smoked about a pack of cigarettes every day. In this group of patients has been noticed heavier disease that manifested itself in deterioration of patients, frequent instability of angina. It is known that metabolic disturbances in cardiac muscle are dependent on many factors, including: arterial blood oxygen saturation, myocardial extraction of oxygen, coronary blood flow, in the cross diameter of coronary arteries, arterial tone, presence of atherosclerotic plaque and coronary vasoconstriction. This group has found a direct correlation between oxygen saturation and such data, as hemoglobin ($r = 0,51$; $p < 0,05$) and erythrocytes ($r = 0,34$; $p < 0,05$), which confirms the combined effect of coronary, ventilation and hemic hypoxia on the myocardium. Also, it has been revealed a tendency of sodium increase in plasma of second group patients ($r = 0,40$; $p < 0,05$), which may confirm renal dysfunction in these patients.

Conclusion: Reduced oxygen saturation in patients with coronary artery disease with concomitant COPD leads to increased myocardial ischemia with possible destabilization of angina.

Key words: angina, coronary vasoconstriction, coronary heart disease.

GOUT AND CARDIOVASCULAR RISK: A COHORT STUDY

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Introduction: Gout is an inflammatory arthritis characterized by self-limiting but excruciatingly painful acute attacks. The relation of gout and hyperuricaemia in cardiovascular diseases has been well documented. It is known, that the cardiovascular disorders are the main reason of death in patients suffering from gout, and also that high blood pressure and hypercholesterolaemia are the main pathogenic mechanism of metabolic changes confounding influence on cardiovascular risk in such patients.

Objective: Our aim was to assess the prevalence cardiovascular risk factors in gout patients.

Methods: A total of 102 consecutive adult male patients aged 41-72 years diagnosed with gout between 2010 and 2012 were enrolled in the study. Hyperuricemia was defined as serum uric ≥ 420 $\mu\text{mol/L}$. SCORE index was used for cardiovascular risk assessment, where low risk was defined when SCORE $< 1\%$, moderate risk was defined when $1\% \leq \text{SCORE} < 5\%$, high risk - $5\% \leq \text{SCORE} < 10\%$, and very high when SCORE $\geq 10\%$.

Results: All patients aged ≤ 45 years had low cardiovascular risk factors which did not depend on smoking status, blood pressure and cholesterol level. These results differed from those obtained in group aged from 46 to 59 years, where moderate and high cardiovascular risk was found in equal proportion among non-smokers. In the same age group, the smokers with hypertension had high and very high cardiovascular risk. Finally, the group of patients aged ≥ 60 years, 56% had very high cardiovascular risk, 34% had high risk, and only non-smokers (10%) had moderate cardiovascular risk.

Conclusions: Gout is associated with cardiovascular risk indicators. The prevalence of hypercholesterolaemia, hypertension and smoking increases with age and should be considered in the complex management of patients suffering of gout.

Key words: gout, cardiovascular risk, hypertension, hyperuricaemia, hypercholesterolaemia, SCORE index.

ARRHYTHMIAS IN RHEUMATIC HEART DISEASES PATIENTS

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Introduction: In recent decades the rheumatism is decreasing. The number of patients affected by rheumatic heart disease failure in the world reaches 15.6 million, and annually are registered about 470000 new cases. The rhythm disturbance is common in these patients. The atrial fibrillation is described in medical literature as the most frequent arrhythmia in patients with mitral valve involvement. In mitral stenosis the prevalence of atrial fibrillation increases with age. It is known that the atrial fibrillation is