

present in 10% of patients aged up to 30 years, while the age over 50 years its reaches till 50% cases.

Objectives: To analyze the characteristics of arrhythmia in rheumatic heart disease at patients hospitalized in the Institute of Cardiology from Republic of Moldova.

Methods: In the study where included 24 patients with defined diagnosis of rheumatic heart disease, 18 (75%) men and 6 (25%) women, median age 58 years old (range 41-75), 12 (50%) patients with mitral valve disease, 7 (29.1%) patients with aortalvalve disease, and 5 (20.8%) patients with associated involvement. We analyzed the patients' complaints, disease history, and the results of the clinical and laboratory examination, the Electrocardiography (ECG) in the resting position, transthoracicechocardiography (EcoCG), Doppler EcoCG.

Results: In the study group were prevailed patients from countryside-16 (66.6%) patients versus 8 (33.3%) patients from urban space. The data analysis showed that ½ (50%) of the patients suffered acute rheumatic fever in childhood (ARF). The common complaints at admission were dyspnea in 20 (83.3%) cases, peripheral edema at 15(62.5%), patients with syncope 3 (12.5%). The ECG evaluation showed the atrial fibrillation (AF) at 16 (66.6%) patients, included 7 (29.1%) with chronic atrial fibrillationform and4 (16.6%) patients hadatrial paroxysmal fibrillation. Theatrial flutter and the extrasystolies where found less 3 (12.5%) and 2 (8.3%) patientsrespectively. The conductivity disturbance certified in 9 (37.5%) patients, including left branch block5 (20.8%) patients, rightbranch block3 (12.5%) patients, and the atrio-ventricular block1 (4.16%) patient. TheEcoCG analysis confirmed the structural changes on valves: mitral valve stenosisin 8 (33.3%) patients, mitral valve regurgitation with different degrees- 4 (16.6%) patients, aortic orifice stenosis-4 (16.6%)patients, and the aortic regurgitation- 3 (12.5%) patients, the tricuspid valve regurgitation in 3 (12.5%) patients.The cardiomegaly has been found in 13 (54.1%) patients, more frequently left atrium dilatation at 9 (37.5%) patients.

Conclusion: The atrial fibrillation was the most frequent arrhythmias in our study group certified at 2/3 of patients, predominantly chronic form at patient with mitral valve involvement.

Key words: Arrhythmia, rheumatic heart disease, Electrocardiography, Echocardiography.

PREVALENCE OF METABOLIC SYNDROME AMONG PATIENTS WITH CARDIOVASCULAR DISEASES

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Introduction: According to the criteria of such organizations as World Health Organization (WHO) and the American Association of Clinical Endocrinologists (AACE) metabolic syndrome (MS) is a disease that can be defined as a complex of metabolic, hormonal and clinical disorders, which are high risk factors for cardiovascular diseases, based on primary insulin resistance and compensatory systemic hyperinsulinemia. A person with MS has a greatly increased risk of cardiovascular disease and premature death. There are 40 - 60 million people suffering from MS in Europe, according to WHO reports.

The **purpose** of this work is to investigate the prevalence of the MS among patients who suffer of different cardiovascular diseases.

Methods and results: At the cardiology department of Vinnytsia Pirogov Regional Clinical Hospital, 174 patients (88 women and 86 men) with MS were examined. First, all the patients filled questionnaire. Afterwards, the body mass index (BMI), waist circumference, blood pressure, heart rate, blood glucose,

total cholesterol and triglyceride (TG) levels were measured. MS was determined according to the criteria (NCEP-Mod ATP-III 2005) in the presence of abdominal obesity: waist circumference ≥ 102 cm or 40 inches (men), ≥ 88 cm or 36 inches (women); dyslipidemia (TG $\geq 1,7$ mmol / L (150 mg / dL)), HDL cholesterol <1.03 mmol / L (<40 mg / dL men), 1.29 mmol / L (<50 mg / dL women) blood pressure $\geq 130/85$ mm .mmHg, the level of fasting plasma glucose $\geq 5,6$ mmol / L (100 mg / dL). In the presence of three or more criteria, patients can be diagnosed with MS.

Conclusion: Results showed that the average age of survived patients was $57,9 \pm 12,1$ years, and the average BMI of the patients was $30,9 \pm 6,8$ kg/m², thus only 15% of the patients had normal BMI. The remaining patients suffered from overweight or obesity. In addition, the waist circumference in 59% of men and 95% of women was more than 102 cm and 88 cm respectively.

The average systolic BP was 144 mm Hg, and diastolic – 89 mm Hg, average heart rate - 73 beats per minute. Besides, in the blood of the patients were detected following changes: 17 % had fasting hyperglycemia, while 70% and 33 % had high levels of cholesterol and TG correspondently. All in all, 48% of the examined patients were found to have MS (58% of females, 42% of males).

According to the results above alongside with external information and other researches in this sphere, it is obvious that patients with MS have a rather poor prognosis and high risk of cardiovascular complications and diseases.

Key words: metabolic syndrome, prevalence, abdominal obesity, hypertension, risk of cardiovascular complications.

CHANGES OF LIPID SPECTRUM IN HYPOTHYROID PATIENTS

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Introduction: Statistical data confirm a continuous growth of the incidence and morbidity of the pathology of thyroid gland, both at the international and national levels. The thyroid hormones play an important role in the regulation of physiological and metabolic processes. Their deficiency has a negative impact on the lipid spectrum. Hypothyroidism is considered to be the main cause of secondary dyslipidemia.

Aim: Evaluation of the changes of lipid spectrum in hypothyroid patients.

Materials and Methods: The study was conducted on 113 patients with primary hypothyroidism with TSH $>4,05$ mIU/l. The evaluation of lipid spectrum indices was performed in the morning after a 12-h fast through blood biochemical test. Plasma levels of total cholesterol, triglyceride, HDL-chol, LDL-chol were studied. Moreover, the statistical correlation analysis between thyroid hormone levels and metabolic indices was assessed.

Results: The execution of biochemical examination determined the following average values: cholesterol $6,90 \pm 2,05$ mmol/l, triglyceride $2,1 \pm 1,38$ mmol/l, LDL-cholesterol $5,36 \pm 1,65$ mmol/l. The average value of HDL-cholesterol was $1,31 \pm 0,41$ mmol/l. The correlation analysis highlights a statistically significant inverse linear correlation between T₃ and T₄ and cholesterol levels, and a statistically significant direct linear correlation between TSH and cholesterol.

Conclusions: Hypothyroidism is associated with: hypercholesterolemia, hypertriglyceridemia, hyperlipoproteinemia LDL fraction, HDL-cholesterol remains unaltered.

Along with the decrease of T₃ and T₄ levels and the increase of TSH, the cholesterol indices rise.