

Results. Parameters of RV diastolic function indicated the RV diastolic dysfunction in patients with MS (E/A ratio 1.20 ± 0.27 in subjects with MS and 1.30 ± 0.33 in controls, $p < 0.001$; E/e' ratio 6.50 ± 1.43 in subjects with MS and 5.11 ± 1.03 in controls, $p < 0.001$). According to multiple regression analysis systolic blood pressure ($\beta = 0.105$, $P = 0.022$), waist circumference ($\beta = 0.092$, $P = 0.031$), plasma glucose level ($\beta = 0.088$, $P = 0.043$) showed independent association with E/e'.

Conclusions. MS plays an important role in RV diastolic dysfunction. The most important parameters that provoke RV remodeling are systolic blood pressure, waist circumference and glucose level, that need special attention of the physicians due to their frequency of occurrence in general population.

Key words: metabolic syndrome, right ventricle, diastolic function

48. THE LEVEL OF KNOWLEDGE ABOUT NON-PHARMACOLOGICAL MEASURES OF TREATMENT IN PATIENTS WITH CHRONIC HEART FAILURE

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Introduction. Chronic heart failure (CHF) is considered a worldwide pandemic that requires a complex regimen of drug and non-medical treatment for a lifetime. The European Society of Cardiology Guidelines recommends applying self-care management, patient ductility to reduce morbidity, mortality and to improve quality of life and patients' adherence to treatment.

Aim of the study. To study the level of knowledge of patients with chronic heart failure regarding non-pharmacological measures for the elaboration of the education program.

Materials and methods. A transverse study that included 20 patients with CHF was conducted. The patients completed a questionnaire that included 5 behavioral considerations in CHF, before and after a schooling program in the study ($n=10$).

Results. The group of 20 patients with mean age of 60.2 ± 0.05 (range 30-90) years, included 7 (35%) women and 13 (65%) men. 6 (30%) of the analyzed patients had high-education, 9 (45%) - with middle-education and 5 (25%) patients - with incomplete middle studies. According to the NYHA classification 6 (30%) patients were included in functional class II and 14 (70%) - functional class III (NYHA). Before schooling only 8 (40%) patients responded correctly to 4 from 5 questions while after schooling 20 (100%) patients responded to 4 and 7 (70%) patients correctly answered all 5 questions. An increase in the rate of high-level patients with non-pharmacological measures in the CHF by 30% was observed, also noticed that patients with higher education have a higher level of knowledge compared patients with secondary education.

Conclusions. Scheduled training of patients with chronic heart failure significantly increased the level of knowledge about non-pharmacological treatment measures.

Key words: heart failure, non-pharmacological measures, level of knowledge.

49. ASSOCIATION OF METABOLIC SYNDROME AND HYPERTENSION WITH LEFT VENTRICULAR GEOMETRY IN CHILDREN

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Introduction. The metabolic syndrome (MS) in association with increased left ventricular myocardial mass (LV Mass), LV myocardial mass index (LVMI), LV hypertrophy (LVH) is an important risk factor for cardiovascular diseases which occur in childhood.

Aim of the study. Study of the MS's influence on LV Mass, LVMI and cardiac remodeling in the hypertensive pediatric population.

Materials and methods. 60 children aged 10 - 18 years were enrolled in the study. Study group included 22 children with MS, and the control group - 38 children with pre-MS. The diagnosis of MS was established according to the International Diabetes Federation criteria (IDF, 2007). Respondents were examined through transthoracic echocardiography.

Results. According to the IDF criteria, MS was confirmed in 36.4%, pre-SM at 63.6%. LV Mass: pre-SM - 151.4 ± 56.2 , score Z - 0.15 ± 0.9 , those with SM - 167.3 ± 48.8 , score Z - 0.24 ± 1.3 . LV Mass > 95th percentile was in $\approx 20\%$ of the pre-MS group and in $\approx 45\%$ in patients with MS. LVMI in the control group - 36.3 ± 8.4 vs baseline - 38.7 ± 10 , LVMI > 95th percentile was determined in $\approx 15\%$ vs $\approx 35\%$. Left ventricle posterior wall relative thickness: 0.39 ± 0.05 vs 0.42 ± 0.05 . In the left ventricle: normal shape 55.5% (MS) vs 80.4% (pre-SM), concentric hypertrophy 30.4% vs 5.2% concentric remodeling 8.1% vs 4.7% eccentric hypertrophy - 6% vs 9.7%. Of all MS components, AHT in 60% of cases was associated with LVMM and VS hypertrophy in the working group and 40% in the control group.

Conclusions. All of the MS components, AHT was more often associated with LV, LVM index, LV hypertrophy, especially among the boys.

Key words: children, metabolic syndrome, hypertension

50. EVALUATION OF THE THROMBOEMBOLIC RISK IN PATIENTS WITH ATRIAL FIBRILLATION

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Introduction. Atrial fibrillation (AF) is considered to be a new 21st-century epidemic, which by the end of 2060 shall affect an estimated 18 million people. More than 6 million Europeans suffer from AF, while in the United States AF is the cause of hospitalization of more than one third of the patients with heart rhythm disorders.

Aim of the study. Identifying the importance of different risk factors in patients with AF in the development of thromboembolic complications, and assessing the efficacy of the CHA₂DS₂-VASc score in their prevention.

Materials and methods. 100 patients with AF from the *Sfanta Treime* Municipal Hospital, the Neurological Institute and the Institute of Cardiology have been surveyed. 2 groups of interest were obtained: patients with (54) and without history of stroke (46). All clinical and paraclinical collected data has been statistically analyzed and compared between the aforementioned groups.

Results. Out of the analyzed 100 patients, 52 were women and 48 men. The mean age was 66.6 years. The mean BMI was 28.2 kg/m². 91% of the patients had congestive heart failure (CHF), 90% suffered from hypertension, 72% of myocardial infarction (MI) and 24% of diabetes (type I/II). Patients had an average CHA₂DS₂-VASc score of 5, varying between 2 and 9. Only 52% of the patients were under anticoagulation control. 35 have administered aspirin, 32 – warfarin, 15 – both. Out of the 52 patients who had their INR checked, only 25% had a therapeutic value between 2-3.

In the stroke group, 30 were women, 24 were men. 60.9% out of the patients who had manifest stroke consequences were women. 66.7% of the patients in the same group were older than 65 and 75.9% had a BMI > 25 kg/m². 90.7% presented hypertension, 87% - CHF, 87% - MI, and