

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

only 24,1% suffered from diabetes. CHA2DS2-VASc had a better predictability for scores >5 (5 – 60%, 6 – 63.6%, 7- 93.3%, 8 and 9 – both 100%). Only 29 of the patients with a history of stroke received anticoagulant treatment, 13 of which administered only aspirin, while 9 – both aspirin and warfarin. Better INR values were obtained in patients who have administered both aspirin and warfarin in the first group, compared to their separate administration.

Conclusions. Female sex was associated with a worse after-stroke evolution. Age and overweight were both independent risk factors for stroke prediction. CHF, MI and hypertension as components of the CHA2DS2-VASc score proved to be important risk factors, compared to diabetes, which did not. CHA2DS2-VASc had a good stroke predictability rates for patients with a score >2. Low anticoagulation coverage and a poor adherence to the anticoagulant treatment in patients with AF were the main causes that led to inappropriate stroke prevention.

Key words: atrial fibrillation, stroke, thromboembolism

51. PARTICULARITIES OF CLINICAL FEATURES, DIAGNOSIS AND TREATMENT OF HYPERTENSION IN WOMEN

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Introduction. Hypertension (HBP) is defined as a blood pressure of over 140/90 mmHg in people aged 18 years or older. The global prevalence of HBP is about 15-37%, rising up to 50% in people older than 60 years old(y/o). According to CINDI study, in RM 30% of the population in between 25 and 64 y/o manifest this disease.

Aim of the study. To present the essential differences of clinical features, diagnosis, treatment and evolution of HBP in women.

Materials and methods. The study involved 214 hypertensive patients – 118 women and 96 men with the average age of 66 ± 4 y/o.

Results. Our study showed that the HBP incidence is in accordance to gender and age; as such, before the age of 65 HBP is more common in men 1:2.29; in the interval of 55 and 65 y/o the ratio was 1:1, but after 65 y/o it is more frequent in women 1.46:1. Cardiovascular (CV) risk factors were predominant in women comparing to men and are represented by: dyslipidemia 72.9% vs 50%; obesity 54.3% vs 35.5%; sedentarism 84.7% vs 52.1% and hyperuricemia 22.1% vs 16.7 %. According to the severity of the disease, most of the women had HBP of 3rd grade 67.8% vs 60.4% associated with very high CV risk – 79.6% vs 70.8%. Complications of HBP were more common in men then women and were expressed by: hypertrophic cardiopathy 31.3% vs 28.8%; acute myocardial infarction (AMI) 10.3% vs 8.4%; stroke 10.3% vs 7.4%; while heart failure (96,6% vs 91,7%) and ischemic heart disease (86,5% vs 79.2%) were more frequent in women. Biochemical findings showed that hyperglycemia was prevalent in men 37.5% vs 28.8%, but changes in the lipid profile were more common in women: high levels of serum LDL (> 3 mmol/l) 47.5% vs 35.4%; TG (> 1,7 mmol/l) 38.9% vs 22.9%; cholesterol 56.3% vs 55.9% and low levels of serum HDL seric (<1,0 mmol/l) 47.5% vs 35.4%. ECG revealed that hypertrophy of left ventricle was more manifest in women 45.8% vs 31.9%. Echo-CG results showed no significant differences associated with gender. In treatment of HBP both women and men used a combined therapy of ≥ 2 drugs 86.5% (women) vs 85.4% (men). While the most popular combination of drugs in women were a beta-blocker(BB) + ACE inhibitor(ACEI) + diuretics (DT) 43.1%, in men it was represented by ACEI + DT 21,9%.

Conclusions. HBP is a major risk factor of cardiovascular disease in women. Age has a decisive role in the debut and progression of the disease, thus, it usually appears in women older than 65 y/o, in post-menopause caused by hypoestrogenemia and hyperproduction of pituitary hormones,