

## 69. THE ASPECTS OF LIPID AND GLUCOSE METABOLISM FOLLOWING HYPERTENSION TREATMENT IN PATIENTS WITH METABOLIC SYNDROME

Ungureanu Diana, Grăjdieru Romeo

*Academic adviser:* Ochișor Viorica, Associate Professor, Cardiology Department, State University of Medicine and Pharmacy "Nicolae Testemițanu", Chișinău, Republic of Moldova

**Introduction:** The metabolic syndrome is a global public health issue. Using medication that reduces the sympathetic over activity as one of the manifestations of MS, such as cardioselective  $\beta$ -adrenoblockers of the III generation (Nebivolol) and the selective agonist of the imidazoline receptors subtype 1 ( $I_1$ ) III generation (Moxonidine) is one of the main directions of pharmacotherapy in hypertensive patients with MS.

**Purpose and objectives:** Highlighting the lipid and glycemic profile modification in hypertensive patients with or without metabolic syndrome after treatment with Nebivolol and Moxonidine.

**Materials and Methods:** The study included 294 hypertensive patients (Hypertension grade I-II as recommended by the European Society of Cardiology, 2007), of which: MS (group I) - 201 patients and without MS (group II) - 93 patients (control group). The diagnosis of MS was based on the WHO recommendations (1998), IDF (2005). In the treatment phase of the study there were included 191 patients: 93 patients administered for 2 months - Nebivolol and 98 patients used Moxonidine. The gathered material was analyzed statistically by the methods of variational and correlational analysis.

**Results:** The group of MS patients had an average age of  $49.57 \pm 0.81$  years ( $p > 0.05$ ) and the group of patients with MS had an average age of  $48.86 \pm 1.03$  ( $p > 0.05$ ). Long-term administration of Nebivolol in the current study significantly reduced total cholesterol, LDL - cholesterol and triglyceride levels in MS patients, while blood glucose levels were not changed. In the patients treated with Moxonidine  $0.2 \text{ mg} \times 2$  twice/day for two months, the glucose profile was statistically insignificantly changed:  $5.18 \pm 0.16$  mmol/l (initial stage) vs.  $5.08 \pm 0.12$  mmol/l (final stage) ( $p > 0.05$ ), but the basal insulinemia at the initial stage of treatment vs. the final stage (2 months):  $9.19 \pm 0.51$   $\mu\text{UI/ml}$  vs.  $8.01 \pm 0.52$   $\mu\text{UI/ml}$  had a significant statistical difference ( $p < 0.05$ ) and the average value of  $\text{HOMA}_{\text{IR}}$  at the initial vs. the final stage, with a decrease in the insulin resistance index:  $1.98 \pm 0.11$  vs.  $1.62 \pm 0.11$ , had also a significant statistical difference ( $p < 0.05$ ). The analysis of lipid indexes in the whole group and groups of patients with and without MS showed a downward trend for TC, LDL-C, TG, but no changes in HDL-C.

**Conclusions:** In patients with metabolic syndrome Nebivolol did not influence significantly the glucose metabolism and it improved the state of the lipid, while Moxonidine did not significantly affect lipid metabolism, but improved the indexes of the glucose metabolism.

**Keywords:** Metabolic syndrome, lipid metabolism, Nebivolol, Moxonidine

## 70. WOLF-PARKINSON-WHITE SYNDROME, CLINICAL CASE

Zabrian Inesa, Lutica Nicolae, Grib Andrei, Ceasovschi Alexandr, Cotov Tatiana, Grib Liviu, Samohvalov Elena

*Academic adviser:* Alexandra Grejdieru, M.D., Ph.D., Associate Professor, Samohvalov Elena, M.D., Assistant, State medical and Pharmaceutical University "Nicolae Testemițanu", Chișinău, Republic of Moldova

**Introduction:** Wolf-Parkinson-White syndrome (WPW) is a type of ventricular pre-excitation realized through an abnormal connection between the atria and the ventricles, known as Kent bundle, prior to nodo-hisian depolarization. The disease has a genetic substrate, it develops mainly in men, involving a high risk of ventricular arrhythmias and sudden death. The incidence of WPW syndrome is 4 cases per 100,000 persons, while the prevalence is 1-3 cases per 1000 pers. Male/female ratio is 1.5-2/1. About 50 % of patients with WPW develop tachyarrhythmias; the frequency of supraventricular tachycardia paroxysms increases from 10% at the age of 20-39 to 36% over 60 years. The management of the disease depends on the paroxysms frequency and the

types of arrhythmia. We present the clinical case of a man with WPW syndrome who develops recurrent paroxysmal supraventricular tachycardia, treated since 1997.

**Clinical case:** Patient L., 52 years old, admitted to the Cardiology Department nr.3 of PMSI MCH „Holy Trinity”. Diagnose: WPW syndrome. Paroxysmal supraventricular tachycardia. HF I NYHA. The complaints presented on onset: palpitations, inspiratory dyspnea, fatigue. History of the disease: diagnosed in 1997, when he developed a paroxysm of supraventricular tachycardia. Arrhythmia paroxysms were the cause of repeated hospitalizations – 2-3 times/year while being on antiarrhythmic therapy with Amiodarone. On physical examination: The overall condition of medium severity. Clean, normal-colored skin. Vesicular breath sounds, rales missing. Rhythmic heart sounds with HR 170 b/min, BP 120/70 mmHg. ECG conclusion: WPW syndrome. Supraventricular tachycardia with HR 170 b/min. Normal heart electrical axis. LV repolarization disorders. EchoCG: moderate dilatation of LA and RA. Induration of the aortic walls. LV hypertrophy, left ventricular contractile function is preserved. Laboratory analysis without deviation from the norm. Treatment: Amiodarone 800mg-intravenously in perfusion until paroxysm cessation, with subsequent administration after schema.

**Conclusions:** Patient L., 52 years with WPW syndrome who develops an arrhythmia paroxysm was hospitalized for its cessation and reassessment of treatment strategy. Pharmacological cardioversion had positive effect. The prognosis is favorable for the patient due to rare paroxysms of supraventricular tachycardias with a good response to drug treatment.

**Keywords:** Wolf-Parkinson-White, pre-excitation, tachycardia paroxysms.

## 71. DIAGNOSIS AND TREATMENT OF HYPERTENSION IN ELDERLY

### Toncoglaz Cristina

*Academic adviser:* **Grib Liviu**, M.D., Ph.D., Associate Professor, State Medical and Pharmaceutical University “Nicolae Testemitanu”, Chisinau, Republic of Moldova

**Introduction:** Arterial hypertension (AHT) is the most common cause of morbidity and mortality in developed societies. Recent data assessed the current prevalence of arterial hypertension in the world around 30 %.

**Materials and Methods:** According to the working hypothesis and proposed tasks we approached closely the procedure of selecting patients on which we would focus our exploration, examining a sample of 150 patients diagnosed with hypertension. The assessment was based on questionnaires previously developed under the general and special methods of clinical examination. For each patient selected was completed an original questionnaire that included: general data, historical data, clinical data, laboratory and instrumental examinations performed and supportive treatment. So we followed the following inclusion criteria: certain diagnosis of hypertension and age >65 years.

**Results:** We found that patients with predominant isolated systolic arterial hypertension was – 36,66 %. The ratio of male / female predominance certified women in the study group - 59.33%. One of the most important criteria that was statistically evaluated is the classification of patients after BP values. The results show that in the study group predominates isolated systolic hypertension - 36,66%, AHT III - 28.66%, AHT gr. II - 32%, AHT gr. I - 2.6%. Laboratory evaluation found that the most common ECG abnormalities encountered in elderly patients with AHT are HVS (38 %), atrial fibrillation (26%) and reduced FE by echocardiography detect 18.66 % cases. From antihypertensive drugs in elderly with arterial hypertension are commonly used diuretics: loop (71.33 %), thiazide - like (26,66 %) and aldosterone (24%), angiotensin-converting enzyme inhibitors (83.33 %) and the calcium channels blockers (56 %).

Analyzing the treatment of the patient we found that most patients receive combination treatment of 3 antihypertensive drugs 39,33% (59 patients), the combination of two antihypertensives was noted in 33,33% (50 patients), the combination of four drugs have been reported in 37 patients and administration of a single drug has been found in 4 patients in the study group.