EFFICACY OF LERCANIDIPINE IN HYPERTENSIVE PATIENTS WITH METABOLIC SYNDROME

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Introduction: The metabolic syndrome, a constellation of abnormalities [obesity, glucose intolerance, insulin resistance, dyslipidemia (low HDL-cholesterol, high LDL-cholesterol and triglycerides], and elevated blood pressure, predicts the development of type 2 diabetes mellitus (T2D) and CV disease. One of the commonest components of metabolic syndrome is hypertension. Lercanidipine, a new dihydropyridine calcium channel blocker of the third generation is recommended in hypertensive patients, but the role in hypertensive patients with metabolic syndrome has not been established clearly yet. Its main advantage over first- and second-generation calcium channel blockers is lower incidence of adverse effects, such as reflex tachycardia and peripheral edema.

Objectives: The aim of this study is to assess the efficacy of lercanidipine in hypertensive patients with metabolic syndrome.

Methods: For this study, we consecutively enrolled 25 patients, of both sexes, aged 18–70 years, with metabolic syndrome and mild-to-moderate essential hypertension (according to the guidelines of European Society of Hypertension and European Society of Cardiology, 2007) who previously had not received antihypertensive treatment. Patients were than allocated to the lercanidipine 10 mg/day. Nonresponding patients after the initial 2 weeks were titrated up to 20 mg.

Results: At baseline, blood pressure (BP) was $157,7\pm13,4/93,6\pm5,3$ mm Hg; after 6 weeks of treatment, BP was $128,1\pm1,9/79,9\pm0,9$ mm Hg ($-30,8\pm3,3/-13,6\pm1,5$ mm Hg versus baseline, $p<0,0001$). Most frequent side effects were headache (10%), flushes (8%), palpitations (4%) and lower limbs oedema (2%).

In conclusion: In our study we observed that lercanidipine was effective and well-tolerated in patients with metabolic syndrome and mild-to-moderate hypertension in the daily practice. **Keywords**: Metabolic syndrome; hypertension; dihydropyridines; lercanidipine; tolerability

CORRELATION BETWEEN CIRCULATING IMMUNE COMPLEXES AND EXPRESSION OF EXTRACARDIAC MANIFESTATIONS IN INFECTIVE ENDOCARDITIS

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Background: Infective Endocarditis is a serious infection of the heart endocardium, particularly the heart valves are associated with a high degree of illness and death. It generally occurs in patients with altered and abnormal heart architecture, in combination with exposure to bacteria through trauma and other potentially high-risk activities involving transient bacteremia. Endocarditis remains a devastating disease with a high mortality despite timely diagnosis and treatment.

Objective: to establish the correlation between circulating immune complexes and the degree of expression of extracardiac manifestations in infective endocarditis and it's utility in nowadays diagnosis.

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 pacients with a normal value of CIC. Among the pacients 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 clasically 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 anevrysms.et.al.

Conclusion: These findings support the hypothesis that CIC may be important in the pathogenesis of peripheral and imunological 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 end results: We examined 20 male patients aged from 47 to 72 years with coronary heart disease with postinfarction cardiosclerosis. 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.