

as myocardial infarction and ischemic stroke, and Lp-PLA₂ inhibitors could significantly reduce the incident of cardiovascular events.

The aim of research was to study the levels of LP-PLA₂ in patients with chronic ischemic heart disease and type 2 diabetes mellitus and effects of the combined therapy with rosuvastatin and polyunsaturated omega-3 fattyacids (omega-3 PUFA) onLp-PLA₂ level. The study included 64 patients with coronary heart disease (CHD) and type 2 diabetes mellitus, randomised into two groups: Group I (n=32) receiving rosuvastatin monotherapy (20 mg/d); and Group II (n=32) receiving combined therapy with rosuvastatin (10 mg/d) and omega-3 PUFA (2 g/d). We assess serum levels of LP-PLA₂ before and after treatment. At baseline, 12 weeks later, all participants underwent the serum levels of Lp-PLA₂.

The results of the study showed that all patients with coronary heart disease associated with type 2 diabetes mellitus diagnosed with elevated levels of LP-PLA₂ in the blood (more than 200 ng/mL). In both groups, three-month therapy was associated with a significant decrease in Lp-PLA₂ level (-28 % and -35 % for monotherapy and combined therapy groups, respectively; =0,001 for both comparisons).

Combined therapy with rosuvastatin and omega-3 PUFA decrease level of the content of LP-PLA₂ better than in group with monotherapy. The advantages of combination therapy provide a higher hypolipidemic effect and allow by reducing the dose of statins to eliminate their negative impact on the reduction of endogenous antioxidants. This effect reduces the risk of developing of cardio-vascular events in patients with chronic ischemic heart disease and type 2 diabetes mellitus.

Hrechko S. I.

THE LEVEL OF KINESIOPHOBIA IN PATIENTS WITH HEART FAILURE

*Department of Internal Medicine, Physical Rehabilitation and Sports Medicine
Bukovinian State Medical University*

Secondary prevention of coronary heart disease is aimed at reducing the risk of recurrent heart attack and is carried out in heart disease. Exercise in cardiac rehabilitation has been treated in an almost positive way in terms of mortality, morbidity, quality of life, and risk factors for people with coronary heart disease. However, the relationship between daily physical activity and risk factors of cardiac diseases is more uncertain for secondary prevention. The positive effect of cardiac rehabilitation is reduced by morbidity and mortality, both general and cardiovascular, including a positive effect on the functional state of patients, their weight, blood pressure, lipid profile, glycaemia, and insulin sensitivity, fibrinolytic activity. It has been observed that ectopic myocardial activity decreases, and anginal attacks decrease and oxygen consumption increases due to exercises. Other benefits include improvement of quality of life and decline of depression.

We have assessed the level of kinesiophobia due to cardiac function evaluated by clinical parameters in patients with cardiovascular disease and performed the analysis of clinical, laboratory, instrumental, 68 patients (27 women) aged $62,9 \pm 6,35$ years hospitalized in the acute coronary insufficiency unit. Kinesiophobia was assessed using the Tampa Scale of Kinesiophobia Heart (TSK-Heart) questionnaire. Rehabilitation programs are complex and need to be identified individually to achieve the established health benefits. The results of the survey indicate that a high level of kinesiophobia was observed in 20% of patients with coronary heart disease six months after the cardiac problem. From the point of view of secondary prevention, it is desirable to detect high levels of kinesiophobia in patients with coronary heart disease, as recognition may facilitate appropriate recommendations and treatment for such patients. It is necessary to emphasize the importance of using a psychometrically based questionnaire. This provides introductory support for TSK-SV Heart as a reliable, valid questionnaire for measuring kinesiophobia in patients with coronary heart disease

There are several important clinical variables that affect the result of rehabilitation associated with the high level of kinesiophobia. Patients with high levels of kinesiophobia had a significantly higher history of myocardial infarction ($p<0,05$), concomitant diabetes mellitus ($p<0,01$), and hypertension ($p<0,05$) compared to patients with low levels of kinesiophobia. In

addition, patients with high levels of kinesiophobia had more complications during their hospital treatment, including signs of heart failure ($p < 0,05$) and such kind of arrhythmia as atrial fibrillation ($p < 0,05$). The presence of kinesiophobia and the fear associated with physical rehabilitation potentially might interfere with successful cardiac rehabilitation. Further research should expand this information and develop optimal treatment interventions for patients with the high level of kinesiophobia and the main goal of increasing physical activity and exercise.

The exercise program is well tolerated and can be used as an alternative to traditional hospital exercise programs. The TSK-SV Heart Scale was assessed as a reliable, valid questionnaire to measure kinesiophobia in patients with coronary heart disease. In patients with cardiovascular disease, kinesiophobia has a multifactorial nature and is much greater in patients with NYHA III, and especially class IV. The impact on kinesiophobia was identified by clinical variables that affected rehabilitation outcomes and prognosis, representing all components of ICF, medical variables, and health-related quality of life in patients with coronary heart disease.

Hulaha O.I.

EPLERENONE USE IN ACUTE MYOCARDIAL INFARCTION

Department of Internal Medicine, Physical Rehabilitation and Sports Medicine

Bukovinian State Medical University

Heart failure (HF) remains an important social problem. The severity of the prognosis of clinically manifest HF is indicated by the fact that approximately half of such patients die within 4 years. An important aspect of research remains the impact on the progression of HF by selecting adequate pathogenetically drug therapy.

In order to identify the influence of markers of HF progression, 121 patients with acute myocardial infarction (AMI), whose average age was 51.5 ± 3.94 years, were examined. All patients received nitrates, β -blockers, angiotensin-converting enzyme inhibitors, anticoagulants, antiplatelets. Patients were divided into two groups: group 1 received basic therapy with the addition of spironolactone at a dose of 25 mg for 25 days; group 2 received basic therapy with the addition of eplerenone at a dose of 25 mg for 28 days. The control group consisted of 15 healthy individuals of the same sex and age. The state of neurohumoral regulation was studied by determining the level of aldosterone and the state of proteolytic activity according to the assessment of azocollagen (by lysis of high molecular weight proteins).

We found that before treatment, the level of aldosterone was 1.6 times higher than in the control (240.58 ± 27.12 vs. 149.36 ± 19.24 pmol / l; $p < 0.01$), and the proteolytic activity of azocollagen before treatment was almost 3.5 times lower than in the control (0.010 ± 0.002 vs. 0.035 ± 0.001 E440 / ml / h; $p < 0.01$). After treatment, aldosterone levels decreased significantly in both groups with a greater tendency in the second group, azocollagen proteolysis in both groups increased significantly, but most pronounced in the group of patients receiving aldosterone antagonist eplerenone.

According to U.P Jorde [2019], the use of aldosterone antagonists in AMI leads to a decrease in intramyocardial aldosterone production, a decreasing in the level of type III procollagen, as well as a marker of myocardial dysfunction - brain natriuretic peptide. Development RALES studies have for the first time shown a 30% reduction in the risk of death in patients treated with long-term spironolactone treatment. The results of the EPHEBUS clinical trial using eplerenone confirmed the success of the tactics of blocking the effects of aldosterone at the receptor level. Thus, the use of eplerenone in patients with AMI leads to a decrease in the stimulation of myocardial fibroblasts, a decrease in the formation of collagen in a cardiac muscle, improvement in the contractile function of the myocardium.

The inclusion of eplerenone in the complex dictation of patients with AMI and HF contributes to the normalization of the processes of the proteolytic activity of blood plasma and leads to the formation of adequate remodeling of postinfarction myocardium, which determines the further course of clinical manifestations of HF.