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RELATIONSHIP OF DAILY ARTERIAL PRESSURE PROFILE AND LIPID SPECTRUM IN PATIENTS WITH UNSTABLE ANGINA

Summary. Currently, the reasons for the variability of such parameters as blood pressure (BP), heart rate (HR), levels of lipid changes, the severity of myocardial hypertrophy, volumetric and structural parameters of the heart have not been fully established. It is important to note that unstable angina is an acute condition and requires the use of drugs for health reasons.

All this would make it possible to develop optimal approaches to the management of patients and, possibly, reduce the total (global) risk of the disease. This work is dedicated to this goal.

Key words. blood pressure, heart rate, levels of lipid changes, myocardial hypertrophy.

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ВЗАИМОСВЯЗЬ СУТОЧНОГО ПРОФИЛЯ АРТЕРИАЛЬНОГО ДАВЛЕНИЯ И ЛИПИДНОГО СПЕКТРА У БОЛЬНЫХ НЕСТАБИЛЬНОЙ СТЕНОКАРДИЕЙ

Резюме. В настоящее время до конца не установлены причины вариабельности таких параметров, как артериальное давление (АД), частота сердечных сокращений (ЧСС), уровни липидных изменений, степень выраженности гипертрофии миокарда, объемных и структурных показателей сердца. Важно отметить, что нестабильная стенокардия является острым состоянием и требует применения лекарственных препаратов по жизненным показаниям.

Всё это позволило бы разработать оптимальные подходы к ведению больных и, возможно, снизить суммарный (глобальный) риск заболевания. Именно этой цели посвящена данная работа.

Ключевая слова. артериальное давление, частота сердечных сокращений, уровни липидных изменений, гипертрофии миокарда.

Introduction. Unstable angina is one of the urgent problems of cardiology. This is due both directly to the high risk to the life of patients associated with the disease, and the possibility of developing an acute coronary syndrome, which, as a rule, transforms into a focus of necrosis. Unstable angina (UA) at the same time significantly accelerates the unfavorable course of the cardiovascular continuum, worsens the processes of preconditioning of the heart [1, 2] and, ultimately, increases mortality and disability of the population [3]. Unstable angina is a poor prognostic form of coronary artery disease, while it is characterized by unpredictability, a rapid change in the course of the disease and can either end in regression of symptoms, or lead to myocardial infarction or sudden death. The course, clinical manifestations, and prognosis of the disease in this group of

patients, according to some authors, largely depend on the presence of arterial hypertension (AH) and concomitant risk factors [4].

In the extensive literature on the problem of unstable angina, the main attention is paid to such factors as thrombosis, the formation of atherosclerotic plaque, its structure and stability, a large number of works are devoted to the treatment of unstable angina [5, 6].

At the same time, the issues of studying the most important parameters of the cardiovascular system, the dynamic change of which, of course, contributes to the course of unstable angina and its outcomes, remain less illuminated.

Purpose of the study. Based on an integrated approach, to study the features of the 24-hour BP profile and the relationship between various indicators of 24-hour BP monitoring and structural and functional changes in the myocardium and lipid spectrum disorders in patients with unstable angina against the background of normal and elevated BP.

Materials and research methods. In this paper, we analyzed the results of a ABPM examination of 40 males and females aged 30 to 65 years suffering from coronary artery disease. The duration of the disease is from 3 to 15 years. The control group consisted of 10 people, relatively healthy people without pathology of the cardiovascular system. The patients we observed received traditional treatment - nitrates, ACE inhibitors, B-blockers, diuretics, antiplatelet agents, anticoagulants, statins, drugs that improve myocardial metabolism and vitamins. Examined 50 patients aged 30 to 65 years and 10 relatively healthy individuals aged 20-45 years, who were randomized into 3 groups: I (control)–healthy individuals–10 people; II-patients with coronary artery disease. Stable exertional angina FC II -20 people; Group III - patients with coronary artery disease. Unstable angina - 20 persons.

Research results and discussion. When assessing the dynamics of daily arterial pressure in patients with hypertension in combination with coronary heart disease in terms of "average", "maximum", "minimum" revealed: 1) average daily pressure - $141 \pm 4.39 / 85 \pm 2.73$ mm Hg. (in men - $148 \pm 5.5 / 93 \pm 9.5$ mm Hg ($p > 0.05$),

in women - $139\pm 5.2/83\pm 2.7$ mm Hg ($p < 0.05$); 2) maximum daily pressure - $175\pm 2.73/114\pm 3.16$ mm Hg. (for men - $181\pm 3.3/114\pm 4.68$ mmHg ($p > 0.05$), for women - $173\pm 4.97/114\pm 2.11$ mmHg ($p > 0.05$ 3) minimum daily pressure - $109\pm 4.12/61\pm 5.1$ mm Hg. (in men - $121\pm 2.45/77\pm 2.94$ mm Hg ($p < 0.05$), in women - $107\pm 2.71/58\pm 4.38$ mm Hg ($p < 0.05$).

The average daily blood pressure in men exceeds the values obtained in women in terms of mean systolic blood pressure (SBP) by 6.1%, diastolic blood pressure (DBP) by 10.8%; maximum for CAD 4.4%; minimal SBP by 11.6%; the minimum DBP by 24.7%. Thus, blood pressure in men decreases to a much lesser extent than in women.

The features of the daily blood pressure profile in patients with unstable angina were studied depending on the clinical form of the disease. It was found that even with normal values of blood pressure in patients with unstable angina pectoris, there are pronounced disturbances in the circadian rhythm of blood pressure, manifested by: 1) an increase in diastolic blood pressure in the daytime; 2) the lack of an adequate decrease in blood pressure at night; 3) an increase in load indicators by increased systolic and diastolic pressure at night. It was found that along with an increase in the indices of hypertension time, there was an increase in the indices of hypotension time at night in the group of patients with unstable angina in combination with hypertension, which indicates a pronounced dispersion of blood pressure. In patients with unstable angina, the value of the daily index was determined depending on the clinical form of the disease. It has been established that an inadequate decrease in systolic blood pressure is associated with an increase in LVMI in patients with unstable angina in combination with hypertension and the frequency of LVH in patients without hypertension.

The role of LP in the development of structural and functional changes in the myocardium was also determined, and it was found that an increase in the level of LP (a) above 30 mg/dL in patients with unstable angina without AH is associated with impaired structural and functional changes in the myocardium.

Conclusion. Violation of the circadian rhythm of blood pressure in patients with unstable angina is associated with an increase in the mass index of the left ventricular myocardium in patients with unstable angina in combination with hypertension and the frequency of LVH in patients without hypertension.

An increase in the level of LP (a) in patients with unstable angina is a marker of maladaptive reactions of the heart.

An integrated approach to the study of the condition of patients with unstable angina, including daily monitoring of blood pressure, structural and functional characteristics, and lipid profile, allows more accurate stratification of the global risk of the disease.

LITERATURE

1. Agafonkina T.V. Daily monitoring of blood pressure / Agafonkina T.V., Mikhailova I.V., Izhutova T.V. - Publisher: ChuvGU, Cheboksary, 2009.- 28s.
2. Akselrod A.S. ABPM indicators in practical and research cardiology / Akselrod A.S. - M.: MMA im. THEM. Sechenov, 2009. - 7s.
3. Alexandria L.G. Features of the daily profile of arterial pressure in patients with acute myocardial infarction with left ventricular dysfunction / L.G. Alexandria, S.N. Tereshchenko, Zh.D. Kobalava, B.C. Moiseev. // Cardiology. -2000. No. 2. - S. 21-23.
4. Akhunova S.Yu. Practical aspects of the method of daily monitoring of blood pressure // Practical Medicine, 2011.-No. 52–P.111-113.
5. Belenkov Yu.N. Left ventricular dysfunction in patients with IHD: modern methods of diagnosis, drug and non-drug correction / Yu.N. Belenkov. // Russian Medical Journal. 2000. - No. 17. - S. 685-693.
6. World Health Organization. Top 10 causes of death in the world. Fact Sheet No. 310 / - 2014. URL: <http://www.who.int/mediacentre/factsheets/fs310/ru/>
7. All-Russian Medical Society for Arterial Hypertension (RMOAG), All-Russian Scientific Society of Cardiology (VNOK). Diagnosis and treatment

- of arterial hypertension. Russian recommendations (fourth revision) // Systemic hypertension. 2010.- No. 3.- 26s.
8. P. P. Golikov, V. L. Lemenev, V. V. Akhmetov, N. Yu. Nikolaeva, B. V. Davydov, and M. Yu. The nature of the relationship of nitric oxide with angiotensin-converting enzyme and malondialdehyde in patients with atherogenic stenosis of the internal carotid artery. //Clinical medicine. 2004. No. 7. pp.15-20.
 9. Gorbunov V.M. Daily monitoring of blood pressure: modern aspects / Gorbunov V.M. - М.: Logosphere LLC, 2015.