
Daily Blood Pressure Profile and Состояние Lipid Metabolism in Patients with Unstable Angina Pectoris

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Introduction. Unstable angina is one of the urgent problems of modern medicine. This is due both directly to the high risk for the life of patients associated with pathology, and the possibility of developing acute coronary syndrome, which usually transforms into a focus of necrosis. Unstable angina significantly accelerates the unfavorable course of the cardiovascular continuum, worsens the processesпрекондиционирования of heart preconditioning [1, 2] and, as a result, increases disability and mortality in the population [3]. Unstable angina is an unfavorable prognostic form of the development of coronary heart disease(CHD), while it is characterized by unpredictability, rapid change in the course of the disease and can either result in regression of symptoms, or lead to myocardial infarction or sudden coronary death. The course, clinical manifestations, and prognosis of this pathology in this group of patients, according to some authors, largely depend on the presence of arterial hypertension (AH) and concomitant risk factors [4, 8, 10].

In the literature, devoted to the problem of unstable angina, the main attention is paid to such factors as thrombosis, formation of atherosclerotic plaque, its structure and stability, a large number of works are devoted to the treatment of unstable angina [5, 6, 7].

At the same time, the issues of studying the most important parameters of the cardiovascular system, whose dynamic change undoubtedly contributes to the course of unstable angina and its outcomes, remain less well-covered [9, 11].

Currently, the causes of variability in such parameters as blood pressure (BP), heart rate (HR), levels of lipid changes, the degree of severity of myocardial hypertrophy, volume and structural parameters of the heart are not fully established.

Purpose of the study. To study on the basis of an integrated approach the features of the daily blood pressure profile and the relationship between the indicators of daily monitoring Blood pressure with lipid spectrum disorders in patients with unstable angina on the background of normal and elevated blood pressure.

Materials and methods of research. We analyzed the results of the SMAD study of 38 male and female patients aged 30 to 65 years suffering from CHD. The duration of the disease is from 3 to 15

years. The control group consisted of 10 people, relatively healthy individuals with no pathology of the cardiovascular system. Наблюдаемые нами The patients we observed received traditional treatment - nitrates, ACE inhibitors, B-blockers, diuretics, antiplatelet agents, anticoagulants, statins, drugs that improve myocardial metabolism, and vitamins. The study included 38 patients aged 30 to 65 years and 10 relatively healthy individuals aged 20-45 years, who were randomly assigned to 3 groups: I (control)–healthy individuals–10 people; II- patients with CHD. Stable angina pectoris FC II-20 people; IIIgroup III–patients with CHD. Unstable angina – 18 persons.

Research results and discussion. When assessing the dynamics of daily blood pressure y in patients with hypertension in combination with coronary heart disease according to the indicators "average", "maximum", "minimum", it was revealed: 1) mean daily blood pressure $-141 \pm 4.39 / 85 \pm 2.73$ mmHg (in men $-148 \pm 5.5 / 93 \pm 9.66$ mmHg ($p > 0.05$), and y in women $-139 \pm 5.2 / 83 \pm 2.7$ mmHg ($p < 0.05$); 2) the maximum daily pressure was $175 \pm 2.73 / 114 \pm 3.16$ mmHg (in men $-181 \pm 3.3 / 114 \pm 4.65$ mmHg ($p > 0.05$), and in women it was $173 \pm 4.97 / 114 \pm 2.11$ mmHg ($p > 0.05$); 3) The minimum daily pressure was $109 \pm 4.13 / 61 \pm 5.1$ mmHg (in men $-121 \pm 2.44 / 77 \pm 2.93$ mmHg ($p < 0.05$), in women $-107 \pm 2.71 / 58 \pm 4.38$ mmHg ($p < 0.05$).

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%; the maximum for SBP is 4.4%; the minimum SBP is 11.6%; the minimum DBP is 24.7%. Thus, blood pressure in men decreases to a much lesser extent than in women.

Features of the daily blood pressure profile in patients with unstable angina depending on the clinical form of the disease were studied. At the same time, it was found that even at normal blood pressure values in patients with unstable angina, there are pronounced violations of the circadian rhythm of blood pressure, manifested by: 1) increased diastolic pressure Blood pressure during the day; 2) lack of adequate reduction of blood pressure at night; 3) increased load indicators with increased systolic and diastolic pressure during the night period. It was found that along with an increase in the time indices of hypertension; there is an increase in the time indices of hypotension 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 was found that an inadequate decrease in systolic pressure was observed. BP is associated with an increase in LVMI in patients with unstable angina in combination with hypertension and frequency LVH in patients without hypertension.

Так же 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 hypertension is associated with a violation of 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 left ventricular mass index. 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.

A comprehensive approach to the study of patients with unstable angina, including daily monitoring of blood pressure, structural and functional characteristics, and lipid profile, allows us to more accurately stratify the global risk of the disease.

Literature

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