

THEORETICAL ASPECTS OF REHABILITATION OF PATIENTS WITH MYOCARDIAL INFARCTION: CLINIC, ETIOLOGY, PATHOGENESIS

Summary. The problem of recovery after a myocardial infarction is quite relevant today, especially against the background of increased morbidity and overall decline in life. High frequency of recurrent heart attacks, complications after myocardial infarction, high degree of disability, etc. One of the most common complications of coronary heart disease, including myocardial infarction (MI), is heart failure (HF). The study identified the main causes of the development and progression of LVHD and determined its impact on life expectancy during one year of observation. The prognostic significance of various markers of inflammation and necrosis in patients with AMI and LVHD was assessed. The influence of different types of revascularization interventions, as well as drugs that have membrane-protective properties on the frequency of lethal events and progression of HF symptoms in this category of patients was assessed.

Key words: AMI and LVHD, myocardial infarction, rehabilitation programs, effectiveness, coronary arteries.

Introduction. However, it is now known that conducting social renewal classes reduces the likelihood of recurrent myocardial infarction, shortens the

duration of the recovery period and generally helps to restore the health and strength of a person who has suffered a myocardial infarction.

But there are a number of problems that prevent the widespread use of such programs. First, it is the reluctance of patients to undergo rehabilitation programs, secondly, the lack of equipment in cardiac and rehabilitation departments, thirdly, the low professional level of hospital staff, etc.

Purpose of the study: to prove the effectiveness of rehabilitation programs for patients with myocardial infarction. Correctly compile a set of physical rehabilitation programs.

Material and Methods: For the past 20 years, myocardial infarction, as a form of coronary heart disease, has been the leading cause of death in most countries.

Myocardial infarction is an acute disease caused by one or more foci of ischemic necrosis in the heart muscle due to absolute or relative coronary insufficiency, as well as the body's response to this injury.

In the vast majority of cases, the cause of MI is atherosclerosis of the coronary arteries, complicated by either thrombosis or hemorrhage in the plaque. At a young age, MI may occur due to functional disorders of the coronary arteries.

In the vast majority of cases (more than 88% of all heart attacks) the immediate cause is vascular obstruction by "swollen" atherosclerotic plaque, its rupture and local coronary spasm. Collagen fibers are exposed, platelets are activated, the coagulation reaction cascade is triggered, which leads to acute occlusion of the coronary artery.

Atherosclerotic changes are found in all three branches. It is believed that after 40 years, coronary artery stenosis increases twice, after 60 years - three times.

At MI stenotic coronary sclerosis is found in 93-95%, coronary thrombosis 20-27%.

I-ischemia (18-24 hours) - disturbance of microcirculation, accumulation of underoxidized products.

II - necrosis (2 days - 10-12 days) - an area of dirty gray color, surrounded by a yellow border, then it begins to grow connective tissue.

III - stage of scarring (up to 2-2.5 months)

IV - postinfarction atherosclerosis.

The spread of the affected area within 48-72 hours from the onset of the disease is called prolonged MI, the emergence of a new focus of necrosis in the range from the 3rd to the 28th day is called recurrence of MI, and after 28 days - recurrent MI. Up to 28 days MI is distinguished as acute, and after 28 days the diagnosis is changed to another form of coronary heart disease - post-infarction cardiosclerosis.

In 99% of cases, MI occurs in the left ventricle, which is due to the anatomical features of coronary blood flow. Depending on the location of necrosis, MI is anterior (anterior-septal, anterior-septal-apical, anterior-lateral), posterior (lower, diaphragmatic, posterior basal), circular. Often with lower MI of the left ventricle, the right ventricle is affected at the same time.

Pain - a typical clinical course, the main manifestation of which is anginal pain, independent of posture and body position, movement and breathing; the pain is suffocating, oppressive, tearing in nature with localization in the entire anterior chest wall with possible irradiation in the shoulder, neck, back, epigastric region; characteristic combination with hyperhidrosis, sharp general weakness, pale skin, agitation, motor anxiety.

Abdominal - manifested by a combination of epigastric pain with dyspeptic symptoms - nausea, which does not bring relief, vomiting, hiccups, belching, bloating; possible irradiation of back pain, abdominal wall tension and pain on palpation in the epigastrium.

Atypical pain - the pain syndrome is atypical in nature (for example, only in areas of irradiation - throat and lower jaw, shoulders, arms) and in nature.

Asthmatic - the only sign in which there is an attack of shortness of breath, which is a manifestation of acute congestive heart failure (cardiac asthma).

Arrhythmic - arrhythmia is the only clinical manifestation.

Cerebrovascular - the clinical picture is dominated by signs of cerebral circulatory disorders; fainting, dizziness, nausea, vomiting, possible focal neurological symptoms.

Hysteroform syndrome - mild agitation associated with medical examination; affective - autonomic paroxysms, occur more often and manifest themselves in the form of affective, respiratory attacks of asthma or inspiratory dyspnea with rapid and shallow breathing, facial expressions of fear, calls for help.

Cardiophobic phenomena - occur especially often in cardiac arrhythmias, are not accompanied by significant intellectual processing, in the evening and at night due to increased vagus nerve tone.

In the rehabilitation of patients who have suffered MI in the second (sanatorium) stage, the primary role is given to therapeutic gymnastics and other forms of exercise therapy.

Tasks at this stage: restoration of physical working capacity of patients, psychological readaptation of patients, preparation of patients for independent life and production activity. All measures at the sanatorium stage are carried out

differently depending on the patient's condition, the peculiarities of the clinical course of the disease, comorbidities and pathological syndromes. Depending on the knowledge of the sanatorium's work and conditions, this may also include swimming, skiing, dosed running, training on exercise machines (ergometer, treadmill), sports games, rowing, etc.

Conclusions: Also in this paper methods of treatment of MI without chemotherapeutic treatment are presented. We considered the mental characteristics of patients with MI and their adaptation in society. Sanatorium-and-spa rehabilitation after a myocardial infarction, the effectiveness of proper nutrition and the use of phytotherapeutic herbs were considered in detail. The application of physiotherapeutic methods of treatment and their effect on the heart muscle and the cardiovascular system as a whole is described in detail.

Bibliography

1. Voronkov L.G. Chronic heart failure and chronic obstructive pulmonary disease // News of Medicine and Pharmacy. - 2010. - No. 338. - S. 16-21
2. World Health Organization. [https://www.who.int/ru/health-topics/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/ru/health-topics/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds))datecirculation: 04/08/2019.
3. Gabbasova L.V., Volevach L.V., Paltusov A.I., Kryukova A.Ya., Khismatullina G.Ya., Kamalova A.A., Demidova N.A., Guriev R.D. Peptic ulcer of the duodenum in young people: Monograph. BSMU of the Ministry of Health of Russia. Tambov: Ucom Consulting Company LLC, 2017. 48 p.
4. Isakov V.A. Epidemiology of GERD: East and West // Clinical and Experimental Gastroenterology 5, 2004. - P. 34-37
5. Komissarenko I. A. Polymorbidity and metabolic syndrome in the elderly // Clinical gerontology. - 2009. - T. 15. - No. 1. - S. 29-38.