## Remove the threat

## Problems of prevention of chronic heart failure

Chronic heart failure (CHF) is the final stage of many cardiovascular diseases, which is the reason for the reduction of life expectancy in developed countries. The prevalence of CHF in different regions of the Russian Federation varies between 7-10%. More than 65% of patients with CHF are in the age groups older than 60 years. Heart failure is in third place among the causes of hospitalization and in the first place in people over 65 years. The ratio of women with CHF to men is approximately 3:1.

Despite the achievements of recent decades in the field of pathogenesis, clinic and treatment, heart failure is still one of the most common, severe and prognostically adverse complications of the cardiovascular system.

Etiological factors in the development of CHF are primarily such widespread diseases as hypertension (GB) and other conditions accompanied by arterial hypertension (kidney disease, endocrine diseases), ischemic heart disease (CHD), myocarditis, cardiomyopathy (CMP), heart disease, inflammatory heart disease, arrhythmias, and extracardial diseases: anemia, sepsis, etc.currently, GB came out on top among the causes of CHF, accounting for almost half of cases.

Despite the widespread introduction of effective means of treatment of CHF, the death rate of patients is still high. It is proved that non-compliance with the doctor's recommendations on medication, weight control and water-co-left regime is one of the main problems of managing patients with CH. It is known that patients with episodes of acute decompensation of CHF have a higher risk of death than patients with a stable course of CHF. Symptoms of CHF are shortness of breath during exercise or night (lying down) weakness, fatigue, rapid heartbeat, swelling of the lower extremities, swelling of the cervical veins, small-bubble wheezing in the lungs, resulting from violations of the structure and function of the heart.

The diagnosis of "heart failure" is made only by a doctor on the basis of clinical, instrumental and laboratory data. Given the wide prevalence of CHF in the world, including in the Russian Federation, the malignancy of the course and the extreme severity of the syndrome, as well as the enormous costs of its treatment, it is necessary to pay special attention to the problem of preventing the development of CHF. Prevention of CHF is primary and secondary. This includes reducing the impact of harmful risk factors on the human body, the formation of a healthy lifestyle of the population. Secondary prevention of CHF — a set of measures to treat existing diseases of the cardiovascular system and prevent the progression of heart failure. In the presence of arterial hypertension, the goal of secondary prevention is to achieve the maximum hypotensive effect while minimizing undesirable side effects; in IHD-adequate antianginal therapy, treatment of lifestenosing coronary atherosclerosis-myocardial arrhythmias; in revascularization, etc. Prevention begins with non-drug measures. It is essential to limit the use of salt. At I FC it is not necessary to use salty food, at II FC it is necessary to nedosalivat food, at III and IV FC-to use products with the reduced salt content. Food should be easily digestible, contain a large number of greens and vegetables. Preference among animal proteins should be given to poultry and fish.

Take food often (4-5 times a day) and small portions. Fluid restriction is also important. The volume of the consumed liquid should not exceed 1.5-2 liters. Regular weight control of patients with CHF, which should be carried out at least 3 times a week, is essential. Weight gain of more than 2 kg in 1-3 days indicates fluid retention in the body and the risk of decompensation of CHF.

It should be recommended that patients be vaccinated against influenza and pneumococcus.

It is not recommended to stay in high mountains, high temperatures, humidity. It is desirable to spend your vacation in the usual climate zone. When choosing transport, preference is given to short flights. Long-term forced fixed position is contraindicated. Getting up, walking and light gymnastics every 30 minutes is especially recommended. Correction of doses of diuretics when staying in an unusual climate for the patient, especially hot and humid, is mandatory,but individual.

All patients suffering from heart failure should stop Smoking. It is strictly forbidden to drink alcohol in alcoholic cardiomyopathy. Patients with a different Genesis of CHF are allowed to use 20 ml of ethanol per day, but without large amounts of intake, such as beer.

If the patient is stable, physical activity should be recommended for all functional classes of the disease. Of great importance is the training of the muscles of inhalation and exhalation (inflating the ball, using a breathing simulator Frolov). At IV FC exercises for small groups of muscles are recommended, at III FC also for large muscles, walking, at II FC-an exercise bike, treadmill, at I - in addition easy running on a place, swimming. The main type of physical activity in heart failure is aerobic exercise: walking, exercise on a stationary bike.

Objectives of CHF treatment are obvious and boil down to preventing the development of symptomatic CHF (early stages) elimination of its symptoms, slow disease progression, improve quality of life, reduced hospitalizations, better outcomes.

To prevent the progression of CHF, it is recommended to take neuromodulators (aldosterone antagonists in small doses, beta-adrenoblockers, if necessary — cardiac glycosides in small doses), angiotensin inhibitors, converting enzyme (ACE) (with contraindications of angiotensin II receptor blockers), diuretics, etc., which prevents the rate of progression of CHF, reduces the number of regospitalizations and increases patient survival.

The most important means of preventing CHF in patients with various forms of IHD are COA reductase inhibitors-statins, which are recommended to all patients (even medium and low-risk SS) in order to prevent the development of cardiovascular complications, including AMI and newly developed CHF, and to achieve the target level of LDL cholesterol.

Long-term use of aspirin in patients after AMI with sinus rhythm is not recommended for the prevention of CHF (III B).

The combination of CHF with diabetes mellitus exacerbates the unfavorable prognosis patients'. Therefore successful treatment of patients with DM and its complications allows you to significantly reduce the risk of developing CHF (I A). It should be noted the importance of controlling glucose levels using drugs that improve tissue sensitivity to insulin.

Thus, we can conclude that CHF requires special attention. Earlier detection and prevention makes it possible to preserve the quality of life, prevent the development of the disease and prevent complications.

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