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CORONARY HEART DISEASE. ANGINA TREATMENT

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Annotation

The causes, principles of diagnosis, prevention and treatment of coronary heart disease (CHD) and angina pectoris are outlined. The main components of nursing care for ischemic heart disease and angina pectoris are presented.

Key words: coronary heart disease, angina pectoris, diagnosis, prevention, treatment, nursing care.

Angina Angina (angina pectoris) is a clinical syndrome manifested by a feeling of discomfort or pain in the chest, the development of which is associated with transient myocardial ischemia due to a discrepancy between the myocardial oxygen demand and its delivery through the coronary arteries. This situation occurs when the lumen of the coronary arteries narrows by 50–70%.

IHD therapy – non-drug and medicinal – includes:

- elimination of clinical manifestations of the disease, primarily angina attacks (or reducing their frequency and intensity);
- improving the quality of life and prolonging the patient's life by preventing fatal complications (sudden death, MI, heart failure)

Non-drug treatment is aimed at organizing a healthy lifestyle, including quitting smoking, combating excess body weight (obesity), increasing physical activity and exercise, preventing psycho-emotional stress at home and at work, proper (cholesterol-free) nutrition, and preventing diabetes. . High levels of cholesterol in the blood lead to the development of atherosclerosis; Therefore, you should significantly limit the content of cholesterol-rich foods in your diet or even completely eliminate them. These include: fatty meats, cheese, liver, cream, sour cream, butter, caviar, nuts, egg yolks. It is useful to enrich the diet with vegetables and fruits, lean meats, fish and poultry, vegetable oils (sunflower, corn, olive, etc.), fermented milk products, wholemeal bread.

Drug treatment involves the use of drugs that improve blood flow in the coronary arteries and reduce myocardial oxygen demand (nitrates, β -adrenergic blockers, calcium antagonists), reducing blood viscosity and the risk of arterial thrombosis (antiplatelet agents), reducing the concentration of cholesterol in the blood (lipid-

lowering drugs).

The most effective nitrates are: nitroglycerin, isosorbide dinitrate (nitrosorbide, cardiquet, etc.), isosorbide mononitrate (monocinque, monocard, etc.) and molsidomine, which is similar in mechanism of action. Nitroglycerin has been used for many years to relieve an attack of angina as an effective, accessible and inexpensive remedy. Isosorbide dinitrate (nitrosorbide, cardiquet, etc.), isosorbide mononitrate (monocinque, monocard, sustacmite, sustac-forte, etc.) are used to prevent and treat angina pectoris. They dilate veins and arteries, including coronary arteries, and reduce blood pressure and the oxygen demand of the heart muscle. Their side effects include headaches, dizziness, palpitations, and a tendency to faint. It is possible to develop tolerance (decreased sensitivity) to nitrates, especially with long-term use of a long-acting drug or transdermal dosage forms. Its manifestations are a decrease in the anti-ischemic effect or its complete disappearance.

To prevent tolerance to nitrates and eliminate it, it is recommended to: increase their dose, discontinue the drug for 3–5 days, intermittent use throughout the day, providing 8–12-hour breaks free from taking nitrates

β -Blockers are considered the mainstay of treatment for angina pectoris. The mechanism of their action is a decrease in heart rate, an increase in the duration of diastole, i.e. reduction of mechanical work of the heart with subsequent improvement of coronary circulation. β -Adrenergic blockers (atenolol, metoprolol, concor, nebivolol, carvedilol, etc.) are often poorly tolerated by elderly and elderly patients due to their adverse reactions: decreased heart rate, decreased blood pressure, bronchospasm, appearance or intensification of signs of heart failure, headaches and dizziness and general weakness.

Calcium antagonists prevent the development of angina attacks by dilating the coronary and other arteries, improving blood supply to the myocardium and reducing its oxygen demand, and also reduce blood pressure. They are used for a combination of coronary artery disease and arterial hypertension (nifedipine, amlodipine, felodipine, etc.); some drugs in this group (verapamil, diltiazem, etc.) provide an additional antiarrhythmic effect.

The choice, dosage and duration of use of medications is within the competence of the physician. Treatment with nitrates, β -blockers and calcium antagonists is started carefully, in small doses. Depending on tolerability and effectiveness, the dose of drugs is gradually increased to the average therapeutic dose. Combinations of these drugs are often used. The nurse should be aware of the possibility of orthostatic hypotensive reactions after the use of these drugs, monitor blood pressure levels and teach patients the skills to prevent fainting and falls.

In the complex treatment of angina pectoris, aspirin, chimes, and ticlodipine are widely used to improve the rheological properties of blood and prevent thrombosis.

Lipid-lowering drugs called statins (atorvastatin, simvastatin, lovastatin, etc.) most effectively reduce the level of cholesterol in the blood.

Aspirin and other antiplatelet agents suppress functional activity platelets, reduce their ability to stick together (aggregate) and, as a result, prevent the formation of blood clots in blood vessels. When using them, especially in elderly and old patients with coronary artery disease, the possibility of bleeding, primarily from the stomach and intestines, should be taken into account. Preference is given to acetylsalicylic acid preparations coated with a special coating (thrombo ACC, aspirin cardio), which prevents the damaging effect of aspirin on the gastric mucosa. Acetylsalicylic acid is prescribed in a dose of 75–150 mg/day to all patients with angina pectoris, with the exception of those with a history of gastrointestinal bleeding, acute ulcer or exacerbation of gastric and duodenal ulcers, hemorrhagic syndrome or allergy to the drug. In order to prevent complications of coronary heart disease, currently proven effective drugs aspirin, as well as ticlodipine and clopidogrel are used for a long time, and sometimes for life.

If there is no effect from dietary treatment (cholesterol-low diet), taking into account the values of lipid metabolism in the blood and risk factors for the development of coronary artery disease, they resort to the use of statins. Treatment with these drugs has a beneficial effect on various clinical manifestations of atherosclerosis and ischemic heart disease, helps reduce the concentration of total cholesterol and LDL cholesterol (dangerous in relation to the development and progression of the atherosclerotic process). All patients with coronary artery disease are recommended to take statins, regardless of the initial cholesterol level. Statin therapy is usually well tolerated, but side effects may develop: increased liver enzymes, muscle weakness and muscle pain. It is necessary to monitor the concentration of creatine phosphokinase and alanine aminotransferase: 1st time – 1–1.5 months from the start of treatment, then – 1 time every 6 months. Contraindications to the prescription of statins include active hepatitis, pregnancy and individual intolerance to the drugs. Treatment with these drugs must be carried out continuously, since within 1 month after stopping their use, the level of blood lipids returns to the original level. The dose of any statin should be increased at intervals of 1 month, since during this period the greatest effect of the drug is achieved. In case of intolerance to statins, alternative drugs are prescribed: fibrates, long-acting nicotinic acid preparations or bile acid sequestrants. Experience with the use of statins indicates that they are reliably effective in the primary and secondary prevention of coronary artery disease, reduce the incidence of dangerous complications of this disease and mortality rates, prolong life and improve its quality.

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