

CORONARY HEART DISEASE. ANGINA EMERGENCY CARE

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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 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%.

For patients with concomitant arterial hypertension, diuretics and angiotensin-converting enzyme inhibitors are added to therapy. To improve metabolism in the myocardium, preductal, mildronate, neoton, carnitene, and coenzyme compositum are prescribed.

Emergency care for an angina attack involves the following sequence of actions:

- ensuring physical and mental peace;
- use of 1 tablet of nitroglycerin (under the tongue), which must completely dissolve;
 - subsequent intake of nitroglycerin tablets - every 5 minutes until the pain disappears;
- calling a doctor, including an ambulance, if there is no effect from the use of 3 tablets of nitroglycerin and the duration of chest pain is >15 minutes;
- use of aspirin (200–300 mg) to prevent possible coronary artery thrombosis;
- ECG recording (12 leads, assessment of the ST line and T wave);
- oxygen – as prescribed by a doctor. If nitroglycerin is not available in tablets, you can use its inhalation form - Nitromint aerosol.

The nurse assesses pulse and blood pressure every 15 minutes until the angina attack resolves; after its relief, these indicators are determined every 2 hours, then every 4 hours throughout the day. The corresponding entries are made in the medical history.

- Indications for hospitalization:
- if acute coronary syndrome is suspected;
 - if the diagnosis is unclear, if it is impossible to conduct an appropriate examination on an outpatient basis;
 - if drug therapy is ineffective;
 - to determine or clarify indications for surgical treatment

The nurse is involved in teaching the patient and his family members how to self-help during an angina attack. They should know:

- due to its weak effectiveness, validol is not a first aid drug for angina pectoris; its use may lead to loss of time in pain relief;
- if an attack occurs during physical activity, it should be stopped immediately; • it is necessary to provide access to fresh air - open a window, unbutton clothes that impede breathing;
- take 1 tablet of nitroglycerin under the tongue until completely dissolved or inject 1 dose of nitromint under the tongue;
- do not swallow a nitroglycerin tablet or drink water to speed up its dissolution;
- a nitroglycerin tablet should cause a burning sensation on the tongue; in its absence, the drug is inactive;
- if there is no effect, after 5 minutes repeat taking 1 tablet of nitroglycerin, or after 1 minute - inhalation of nitromint;
- if there is no effect, take nitroglycerin for the 3rd time after 5 minutes or nitromint after 1 minute.

The patient and his family members should know that if the pain lasts >20 minutes and there is no effect after taking nitroglycerin or nitromint three times, it is necessary to immediately call a doctor and chew 200–300 mg (half a tablet) of aspirin before he arrives. Aspirin should not be taken: if you are intolerant to it (allergic reactions); if the patient took aspirin that day; with exacerbation of peptic ulcer of the stomach and duodenum.

It is also important to know the situations that the patient and his family should report to the doctor or nurse:

- pain in the chest, arm, neck, chin and back, if they are not relieved by taking nitroglycerin and last for 30 minutes; increased frequency and intensity of pain;
- angina attacks began to be accompanied by sweating and nausea;
- the appearance of shortness of breath, irregular pulse or an unexpected change in its frequency and the patient's inability to carry out the regimen recommended by the doctor. With the progressive course of coronary artery disease and the ineffectiveness of drug therapy, which significantly worsens the patient's quality of life, coronary angiography is performed and the issue of surgical treatment of the disease is decided. Often they resort to coronary artery bypass surgery, in which they bypass the coronary artery affected by atherosclerotic plaques by sewing in its own vessel (part of the vein of the leg or radial artery), connecting the aorta and coronary arteries, and restoring the blood supply to the heart. In some cases, coronary angioplasty is used - insertion of a catheter, at the end of which there is an inflating balloon, into the coronary artery through the brachial or femoral artery. When the balloon is inflated, the lumen of the vessel expands and coronary circulation improves. More effective than balloon

angioplasty is stenting, in which a supporting stent (mesh, coil) is installed into the lumen of a stenotic coronary artery, expanding the affected artery

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