UDC 616.12-005.4-085 14.01

NURSING CARE FOR CORONARY ARTERY DISEASE, ANGINA PECTORIS

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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.

Coronary heart disease (CHD) is a disease characterized by a discrepancy between the myocardial need for oxygen and its supply through the coronary blood flow. IHD is one of the most common diseases among the population, especially in economically developed countries. It ranks one of the first places in the structure of morbidity, mortality and disability in the Russian Federation. Population-based epidemiological studies conducted in our country indicate a high prevalence of IHD in developed regions. Classification of coronary heart disease Currently in Russia, the nomenclature of coronary artery disease is used, proposed by a working group of WHO experts in 1979, based on modern ideas about the pathogenesis and course of its various forms: 1. Primary circulatory arrest (sudden coronary death). 2. Angina. 2.1. Angina pectoris. 2.1.1. New onset angina pectoris. 2.1.2. Stable angina pectoris (indicating functional class from I to IV). 2.1.3. Progressive angina pectoris. 2.2. Spontaneous (variant) angina (Prinzmetal's angina). 3. Myocardial infarction. 3.1. Definite. 3.2. Possible. 4. Heart rhythm disturbances. 5. Heart failure. Risk factors for the development of IHD are: 1. Age. The prevalence of coronary artery disease increases with age and is 150 per 100,000 inhabitants at the age of 50 years. 2. Gender IHD is more common in men 45–50 years old (men are affected 4–5 times more often than women). 3. Hypercholesterolemia. The incidence of coronary artery disease is directly

proportional to the level of total blood cholesterol. Moreover, the higher the cholesterol content in LDL relative to HDL cholesterol, the higher the risk of CHD. 4. Smoking, all other things being equal, increases the risk of coronary heart disease by 60%, since carbon monoxide in the blood of smokers damages the endothelium of the coronary arteries and increases platelet adhesiveness. 5. Hypertension. The higher the systolic or diastolic pressure, the greater the likelihood of developing coronary artery disease. 6. Diabetes mellitus, which reduces the lipolytic activity of the vascular wall and causes fibrosis and sclerosis, which contribute to the progression of atherosclerosis. 7. Muscular hypokinesia. Reduces the tension of redox processes and is accompanied by hyperlipidemia. 8. Taking hormonal contraceptives, which consist of estrogens and progesterone, causing metabolic changes. 9. Heredity. A family predisposition to IHD has been proven. Myocardial ischemia develops when there is a discrepancy between the myocardial need for oxygen and its delivery (myocardial oxygen demand increases and coronary blood flow decreases). Nursing process for angina Angina is a clinical syndrome of coronary heart disease, characterized by paroxysmal pain of a compressive nature localized behind the sternum, radiating to the left arm, shoulder and accompanied by a feeling of fear and anxiety. Etiology - risk factors for coronary artery disease, provoking factors (see above). The essence of the disease is that there is a disruption in the flow of blood through the coronary vessels that supply blood to the myocardium, which leads to pain in the heart area or behind the sternum. Angina pectoris is a clinical reflection of acutely developing oxygen starvation (ischemia) of the myocardium. Insufficient blood flow through the coronary arteries can be caused by many reasons: atherosclerotic plaques, spasm of the coronary arteries, myocardial overstrain under heavy physical and nervous stress. The cardiovascular system is closely connected with the cerebral cortex, so severe emotional stress can cause disruption of the innervation of the coronary arteries and contribute to the development of coronary insufficiency angina pectoris. An attack of angina is associated with physical or emotional stress, therefore, with coronary heart disease, we talk about angina pectoris in contrast to reflex angina. There are the following types of angina pectoris (in accordance with the modern international classification: 1. new; 2. stable (indicating the functional class - I, P, III, IV); 3. progressive; 4. spontaneous (special); 5. post-infarction early. All types, except stable, are classified as unstable angina (with the risk of developing myocardial infarction) and require mandatory hospitalization. Clinical picture. The clinical picture of angina is quite characteristic. Typical symptoms of the disease are paroxysmal pain of a compressive nature, localization of pain in the heart and behind sternum, irradiation - to the left half of the chest, left arm, lower jaw. Usually the pain begins in the upper part of the sternum or in the third or fourth intercostal space. Patients feel compression, heaviness, a burning sensation behind the sternum. During an attack, the patient feels a feeling of fear, freezes, being

afraid to move and pressing your fist to the heart area.Attacks of pain occur most often during movement, physical or mental stress, due to increased smoking, cooling. There are angina pectoris (pain occurs during movement, physical stress) and angina at rest (pain occurs at rest, during sleep). During an attack of angina, taking nitroglycerin, as a rule; stops the attack. Body temperature remains normal. Changes in the ECG are not observed or are not persistent, a downward shift of the S-T interval may be observed, and the T wave may become negative. With appropriate treatment, these indicators return to normal. The morphological composition of blood in patients with angina pectoris remains unchanged. Auscultation of the heart does not reveal any specific changes. An attack of angina lasts 1-5 minutes. More a prolonged attack should be considered as a possibility of myocardial infarction. The course of the disease is wavy. Character - periods of remission alternate with periods of increased frequency of attacks. If angina attacks occurred for the first time 1-2 months ago, they speak of new-onset angina pectoris. If they have existed for a long time, and the patient knows under what physical activity it occurs and with what dose of nitroglycerin it is relieved, stable angina is diagnosed. Violation of the attack algorithm (an attack with a lower load is relieved with a larger dose of nitroglycerin) is characteristic of progressive angina. Newly occurring and progressive angina are collectively called unstable and dangerous, as they can be complicated by myocardial infarction. Patients with unstable angina should be hospitalized. JItreatment. During an attack of angina, pain must be relieved immediately. The patient is given drugs that dilate the coronary vessels of the heart: nitroglycerin under the tongue. A heating pad is placed at the feet, and mustard plasters are placed on the heart area. If after 3 minutes the pain has not stopped, repeat the use of nitroglycerin under the tongue. If the pain does not stop, call a doctor and administer an analgesic intravenously, and if the pain persists, it is necessary to administer a narcotic analgesic (Promedol), and the patient should have an ECG and decide on the issue of hospitalization with suspected myocardial infarction. Three groups of drugs have a real effect in ischemic heart disease: nitrates (sustac-mite, sustac-forte, nitroorbide), calcium antagonists (nifedipine, verapamil, finoptin, etc.) and b-blockers (anaprilin, trazicor, cordanum, atenolol, etc.) Prescribes antiplatelet agents (acetylsalicylic acid, ticlid, chimes, etc.). During an attack of angina, the patient is provided with complete rest, an influx of fresh air, if there are no mustard plasters, sometimes lowering the left arm up to the elbow into hot water relieves the pain. For emotionally excitable persons, it is advisable to prescribe sedatives: Valocordin (Corvalol) 25-30 drops per dose, Seduxen 1 tablet 2 times a day. Antiatherosclerotic therapy is prescribed. The general principles of treatment include measures to reduce blood pressure, rational diet therapy, and reducing the amount of fluid consumed. Physical therapy, systematic walks, and spa treatment play an important role in the treatment of angina pectoris. Prevention. Primary prevention involves eliminating risk

factors for coronary artery disease. Secondary - in clinical observation, prescribing, if necessary, anti-atherosclerotic therapy, antiplatelet, coronary therapy. For incessant, frequent (many times during the day and night), attacks caused by obliteration of the coronary arteries, surgical treatment is resorted to - coronary artery bypass grafting, etc.

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