Western European Journal of Medicine and Medical Science
Volume 2, Issue 11, November 2024
https://westerneuropeanstudies.com/index.php/3
ISSN (E): 2942-1918 Open Access| Peer Reviewed

ETIOPATHOGENESIS OF ISCHEMIC HEART DISEASES AND MECHANISM OF PATHOGENETIC INFLUENCE ON OTHER ORGAN SYSTEMS.

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Abstract. Ischemic heart disease or ischemic heart disease (IHD) is a chronic or acute disorder of blood supply to the myocardium (the muscular layer of the heart). This condition is caused by insufficient supply of oxygen to the heart. It occurs when the arterial blood supply to the heart muscle is limited due to damage to the coronary vessels. Acute form of ischemic heart disease - myocardial infarction, chronic form - angina pectoris. Cardiovascular diseases occupy the leading place in the sad list of causes of death in many developed countries. In recent years, there is a trend of decreasing death from this cause. Since 2015, the death rate from cardiovascular diseases has accounted for less than half of all deaths and continues to decline. This article is about the treatment of patients with ischemic heart disease, the article talks about the types of congenital heart defects, their causes and complications observed in patients with the disease, treatment methods and measures aimed at their prevention.

Key words: ischemic heart disease (IHD), angina pectoris, mitral valve insufficiency, left ventricular aneurysm, pericarditis.

Definition. Ischemic heart disease (YIK)-unites a group of diseases caused by the inability of the myocardium to compensate for the need for oxygen that comes with the blood. The reason why oxygen needs are thus not covered is in most cases due to insufficient blood supply to the myocardium in connection with damage to the coronary vessels due to the atherosclerotic process. Therefore, ischemia of the heart is also said to be coronary heart disease. There are now four types of ischemia variations:

1) Stenocardia;

2) sudden death due to heart disease;

3) myocardial infarction;

4) chronic ischemia of the heart. [1]

Etiology and pathogenesis. The main cause of ischemic heart disease is in most cases atherosclerosis of the coronary vessels of the heart, sometimes spasm of large vessels, the formation of thrombi and emboles, and, as a result, the inability to satisfy the demand of the myocardium for oxygen. Crown vascular atherosclerosis occupies a leading place in the

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development of the disease not only among adult men even under 40 years of age. The following manageable and uncontrollable risk factors are important in the development of the above processes. In the presence of them, the likelihood of causing the disease and complications is very high. Uncontrollable risk factors: age, sex, hereditary predisposition to cardiovascular diseases.

Uncontrollable risk factors: the presence of lipid metabolism disorders in the patient and his parents-hypercholesterolemia, hypertriglyceridemia, hypoalphaxolesterolemia and their accompanying, the presence of AG, smoking, obesity, the presence of carbohydrate metabolism disorders in the patient and his parents, hypodenamia, psychoemotional tension, diabetes mellitus, etc. Identifying these factors early and eliminating them as much as possible improves the quality of life of patients and reduces the risk of complications and sudden death. [4]

Classification. Created in 1989 by employees of the scientific center of Cardiology of Russia on the basis of proposals of the WHO expert committee. Classification determination is based on clinical data, ECG results, and evidence of enzymatic activity. According to this classification, YuIK is divided into 6 groups.

(1) sudden Crown vascular death (primary cardiac arrest) - occurs due to the instability of the blood supply to the myocardium and leads to ventricular fibrillation (individual, at different times and irregular contraction of the muscle fibers of the ventricles of the heart). If no resuscitation agents have been performed or they have been inconclusive, then primary cardiac arrest is defined as Crown vascular death from a toad. This death is expressed as an instantaneous death in the presence of witnesses or within 6 hours of the onset of a heart attack.

(2) Stenocardia - two types are distinguished.

a. Tension stenocardia is characterized by the formation of a Hyrum of pain behind the collarbone in severe physical labor and emotional states (negative emotions-excitement) or under the influence of other factors that lead to an increase in the metabolic needs of the myocardium (increased arterial pressure, tachycardia).

b. Stable strain stenocardia. More than 1 month has passed since the appearance of attacks.

(3) myocardial infarction. The diagnosis of acute myocardial infarction is based on the clinical picture of the disease, ECG changes, and increased serum enzyme activity.

(4) diagnosis of post-infarction cardiosclerosis is made 2 months after the occurrence of myocardial infarction. The diagnosis indicates the presence of chronic heart aneurysm, internal rupture of the myocardium, dysfunction of the papillary muscles of the heart, intra-cardiac thrombosis, the nature of cardiac rhythm disorders, the type and stage of heart failure.

(5) cardiac arrhythmias (with the form indicated)- the arrhythmic variant of the Yuik has the right to an independent disease at this time, if the arrhythmia is considered the only sign of the Yuik. The diagnosis must be confirmed by a coronographic examination.

(6) heart failure (with the form and stage indicated) - can be formed as a result of various types of Yuik (myocardial infarction, post-infarction cardiosclerosis, heart aneurysm), but if heart failure develops without YuIK symptoms, then in this case the process in question should be

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expressed in the form of a complication of the underlying disease. In the modern clinical classification of yuik, the painless type of disease is not expressed. This does not mean that Yuik absolutely will not be without an attack of anginosis. Such cases are also observed in patients with acute myocardial infarction. [3]

Mitral valve deficiency. 50% of patients with complete MI may experience mild, and 4% may develop severe mitral valve insufficiency, resulting in death in 24% of cases if not resolved by timely jarroxy. This is caused by dysfunction or breakage of the suckling muscles. The dysfunction of the suckling muscles (mainly the back) develops in the form of ischemia of the left ventricular muscles, which is located close to this socket. In auscultation, a systolic murmur is heard at the apex of the heart due to the relative insufficiency of the mitral sac. Dysfunction is diagnosed with Exocg and does not require special treatment measures. Breakage of the suction muscles is observed in 1% of patients with MI. In most cases, the back sucker muscle is injured. This complication is manifested by signs of rough systolic noise and pulmonary edema at the peak of the sudden heart on the 2-7 day of the disease. The diagnosis is confirmed using ExoKG. In the absence of timely surgical treatment, 50% mortality is observed in 24 hours of the disease, and 94% for 2 months. [6]

Left ventricular aneurysm. In the left ventricular aneurysm-a Maxillary paradoxical bulge of the ventricular wall is considered. Aneurysm more often occurs in the anterior wall of the left ventricle and in the Gill socket. Lower back wall aneurysms are very rare. Pathomorphologically, anearism is then a connective tissue scar on which calcium salts can sit. A flat thrombus can sit on its surface. In 80% of patients, pericardial pulsation is found on the left side in the range of 3-4 ribs, incompatible with the cardiac crest. Alternatively, the objective examination may include dilation of the heart boundaries, the formation of systolic murmur with a weak tone I at the apex, and the appearance of tone II accent on the pulmonary artery, signs of acute or chronic circulatory failure, thromboembolic complications. No dynamic changes characteristic of MI periods are observed in the EKG (retention of the ST range above the midline - hardened EKG). ExoKG transfer is important in diagnosis. This complication can also be eliminated only by jarrox. [6]

Pericarditis. Various pathological processes can begin in the pericardium: inflammatory processes, changes associated with hemodynamic tumors, congenital anomalies, among others. In the field of hemodynamic changes, serous fluid accumulates in the pericardium cavity, such a phenomenon is observed in kidney, liver diseases, heart failure (hydropericardium). When the myocardium ruptures at the site of the infarction, it separates into the aortic layers, causing blood to overflow into the pericardium when the chest is damaged when this process reaches the pericardium cavity, said to be a hemopericardium. Congenital anomalies such as the complete or partial absence of the pericardium are an extremely rare phenomenon. Among the many pathological processes that can begin in the pericardium, inflammatory processes in the pericardium are clinically more important than all. Pericarditis in most cases is considered a secondary process, in any case a complication of another underlying disease. Pericarditis as a primary pathological process is much less common. According to the clinical course are variations of acute and chronic pericarditis. By the nature of the exudative reaction, pericarditis is divided into the following varieties: serous, serous-fibrinous, fibrinous, purulent, hemorrhagic. It should be noted that the nature of exudate can be different depending on the etiological factor and the state of macroorganism. [2]

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Laboratory-asbobium inspections. Stable strain of stenocardia in the type of stenocardia, there are no changes in laboratory indicators. In contrast, in some cases, patients with non-stable stenocardia may have an increased blood level of KFK, AsAT, troponin, and cholesterol. Some changes are also observed in the hemostasis system.

Electrocardiography. When no changes are detected in the ECG s of patients suspected of having ischemic heart disease, an ECG is usually performed with loading. Along with the diagnosis using this method of examination, it is possible to determine the individual resistance of the patient to physical exertion, the functional class of stable stenocardia, the prognosis of the disease, the effectiveness of the treatment carried out, as well as the amount of antianginal drugs.

Coronary angiography is one of the methods for reliable detection of the presence of atherosclerosis, which greatly helps to determine the degree and size of narrowing of the crown arteries.

With exocardiography, the degree of contraction of the ischemic part of the myocardium is assessed. [5]

Treatment. Treatment of YIK is aimed at restoring coronary circulation, ensuring myocardial oxygen demand, improving metabolism, and coordinating the activities of the cardiovascular system. Drugs and non-drug treatments are used. In drug-free treatment, smoking, limiting alcohol consumption, reducing excess body weight, avoiding eating foods made from animal fats, etc. In the treatment with drugs, the following means are used: antiishemic-antianginal, antithrombin, antithrombotsitar. Based on the indications, Crown vascular revascularization is carried out. [5]

Conclusion

One of the common diseases among the population today is YIK. The bulk of cases of death caused by diseases are also at the expense of this disease. The sad thing is the increased incidence of this disease even among young people. And the main reasons for this are the presence of a wrong lifestyle among the population, improper nutrition, high content of fatty, salty, gaseous, alcoholic and energy drinks, hypodynamia can even remain nervous, irritable, as a result of affecting the nervous system as a result of over-normal use of smartphones, and this, of course, has a negative effect on Therefore, to prevent YUKTK, it is possible to involve the population in the correct way of life and recommend to undergo a doctor's examination 1 or 2 times a year, and to carry out measures to popularize a healthy turnstile among the population, as far as possible, can cause these diseases to decrease among the population.

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