



Modern Principles of Diagnosis of Cardiovascular Diseases

**Makhamadhojayeva
Mukhabbat Abdusatarovna
Adilova Nargiza Oripovna**

Tashkent State Institute of Stomatology, teacher of the
Department of Therapeutic Sciences

Tashkent State Institute of Stomatology, teacher of the
Department of Therapeutic Sciences

ABSTRACT

This article provides information about the modern principles of diagnosis of cardiovascular diseases.

Keywords:

Heart, artery, atherosclerosis, hypertension, myocarditis, infarction, vessel.

Diseases of the cardiovascular system - diseases of the heart, arteries and veins. They are many and varied. Some of these diseases (rheumatism, myocarditis, etc.) damage the heart, some arteries (atherosclerosis) or veins (for example, thrombophlebitis), others damage the entire cardiovascular system (hypertension). Diseases of the cardiovascular system remain the main cause of disability and death around the world. Diseases of the cardiovascular system are diseases of the heart, arteries and veins. They are many and varied. Some of these diseases (rheumatism, myocarditis, etc.) damage the heart, some damage arteries (atherosclerosis) or veins (for example, thrombophlebitis), others damage the entire cardiovascular system (hypertension). Ischemic heart disease is caused by insufficient blood supply to the heart muscles. It is mainly caused by atherosclerotic changes of the coronary arteries of the heart, spasm, as well as blood clots (thrombosis) in their cavity (see [Ischemic heart disease]). Arterial hypertension is the most widespread among diseases of the cardiovascular system. It is

widespread and is more common among older people. It is the main pathogenetic factor that often causes death or disability, such as myocardial infarction, stroke, heart failure. Arterial hypotonia (hypotonia disease) is relatively rare. It is observed in many diseases of the cardiovascular system (myocardial infarction, cardiomyopathy, myocarditis), neuroses, hypothyroidism, stroke, in the form of arterial hypotonia syndrome.[1]

In clinical practice, heart muscle inflammation - myocarditis and non-inflammatory damage - myocardiodystrophy are observed more often. Endocarditis (inflammation of the lining of the heart) is caused by rheumatism and other acquired heart defects. Leerycarditis is rare. [Ischemic heart disease, myocarditis and myocardiodystrophy, as well as as a result of neurotic conditions, heart arrhythmias can lead to heart block. Cardiac arrhythmias are acceleration (tachycardia) or slowing (bradycardia) of heart contractions (beating), abnormal additional heart contractions (extrasystole); sudden acceleration of heart rate (paroxysmal tachycardia); manifests itself

in incorrect contraction of the heart at different time intervals (oscillating arrhythmia) and others. Heart block is a violation of the transmission of nerve impulses in the conduction system of the heart (for example, interruption of the passage of impulses from the lobes to the ventricles or to the legs of the bundle of His). When the activity of the nervous system of the heart is disturbed due to neurosis, along with arrhythmias, there are sensations of rattling, stabbing, and throbbing pain in the heart. Atherosclerosis and hypertension are common diseases of arterial vessels, and most of them go together. Atherosclerosis affects not only the coronary vessels, but also the aorta and its large branches, including the renal artery, cerebral vessels (see Stroke), and the peripheral vessels of the arm. Inflammation of arterial vessels — arteritis is more often caused by infectious (eg, wound, sepsis) and allergic (see Serum sickness) and collagen diseases. The clinical form is obliterating endarteritis, aortic panarteritis, etc. Varicose veins and thrombophlebitis are among the most common diseases of venous veins.[2] Heart failure is manifested by pathological signs (bruising of the skin, shortness of breath, swelling of the legs, etc.) Shortness of breath while doing something is a pathological symptom. Acute heart failure is very dangerous, but it is rare. He has an attack of sudden or sudden shortness of breath and suffocation (see Cardiac Asthma). Most people have cardiovascular diseases. as a result, the contraction function of the heart muscle and the contraction power of the muscle layer of the vascular wall decreases.

As a result, blood circulation in the body is disturbed. Depending on which of these factors prevails, heart or vascular failure occurs. According to the World Health Organization, 56% of all deaths are caused by diseases of the cardiovascular system. In European countries, cardiovascular diseases cause the death of 4.3 million (48%) people per year. According to the State Statistics Committee, 62.1 percent of citizens who died in the Republic of Uzbekistan in January-June 2019 were caused by diseases of the circulatory system. Diseases of the cardiovascular system are closely related to a

person's lifestyle and existing risk factors. Many risk factors can be controlled by lifestyle changes, while some (arterial hypertension, dyslipidemia, and blood sugar) can be corrected by medication. [3]Cardiomyopathy is a disease associated with primary myocardial damage — cardiovascular disease. , arterial hypertension, the presence of structural and functional negative changes in the heart muscle in the absence of acquired and congenital heart defects. The real reasons for the occurrence and development of cardiomyopathy have not yet been determined. There are a number of factors that trigger the occurrence of this disease: heredity, adverse effects of the external environment, viral infections, autoimmune diseases, endocrinological diseases, exposure to allergens, alcoholism, heart pathologies, etc. In the initial stage, cardiomyopathy is usually asymptomatic. will pass. The patient may have the following complaints: pain in the heart area, severe fatigue, general weakness, severe heaviness in the right rib cage, shortness of breath, shortness of breath and other similar symptoms.[4]

Treatment of cardiomyopathy depends on its type:

- hypertrophic cardiomyopathy is a thickening of the heart muscles and, as a result, a violation of the heart's blood pumping function. Medicines are prescribed by doctors, but septal myectomy surgery is recommended in cases of danger. As a result of the operation, the thickened heart muscles are reduced and normal blood circulation is restored.

- dilated cardiomyopathy is a state of expansion of the main blood-pumping chamber of the heart - the left ventricle, in which the heart is unable to fully pump blood.

- in restrictive cardiomyopathy, the heart muscles harden and their elasticity decreases. As a result, the heart does not expand and the heart does not fill with enough blood per heartbeat.

An electronic cardiac pacemaker that generates impulses for a slow beating heart, a defibrillator for a dangerously unstable heart, an auxiliary ventricular implant for a heart with impaired blood pumping, is offered to the

patient as a solution to improve the condition of the patient in various situations, especially when drugs cannot help. advice can be given - the doctor emphasized. A defect in the wall between the heart valves is a persistent defect, deficiency and changes in the anatomical structure of the heart that interfere with normal blood flow. It is one of the most common congenital heart defects in children older than 3 years. In this condition, there is a hole(s) in the interdispheric septum (wall) that separates the right and left atria in the heart. The presence of this hole causes pathological blood flow from the left atrium to the right and can cause heart and lung problems in the future. The modern method of treating the disease is the endovascular method. In this case, a long tube-shaped catheter is inserted into the heart through the femoral vein and the defect is closed using a special coating. If the size of the defect is large, minimally invasive surgery may be recommended. In this case, the operation can be performed through a 4-6 cm incision in the right part of the patient's chest. Coronary artery bypass grafting - This procedure is used to restore blood flow to blocked or severely narrowed coronary arteries. The essence of the method is that the surgeon creates a "shunt" (spare blood vessel) bypassing the blocked coronary arteries to restore blood flow. A blood vessel transplanted from the patient's leg is used as a shunt. This type of surgery restores proper blood flow to the patient. Transcatheter aortic valve replacement (TAVR) is usually recommended for patients diagnosed with severe aortic stenosis.

When blood is pumped from the heart to the body, the aortic valve opens, and when it does not open and close properly, the patient is diagnosed with aortic stenosis. As a treatment for this disease, it is recommended to replace the worn and narrowed aortic valve, which causes moderate blood flow in the body. Transcatheter aortic valve replacement is sometimes called transcatheter aortic valve implantation (TAVI).

Conclusion:

TAVR is a minimally invasive surgical procedure in which a tube-shaped catheter is guided into the heart through a large blood vessel in the leg or through a small incision in the chest, and an implant is placed to replace a worn-out aortic valve. After the implant, the old aortic valve is removed. The new implant starts working immediately. The decision to treat aortic stenosis with TAVR is made for each individual after consultation with a multidisciplinary team of cardiac medical and surgical specialists.

References:

1. A.G'. Ahmedov, G.Kh. Ziyamutdinova. "Anatomy, physiology and pathology" Tashkent: "Fan and technology", 2016. B.581[1]
2. S. Mavlanova, M.M. Mirzaolimov Physiology of man and animals (educational - methodological complex). Namangan, 2021. - B.147[2]
3. E. B. Babsky, A. A. Zubkov, G. I. Kositsky, B. I. Khodorov. "Human Physiology" Uzbek SSR "Medicine" publishing house Tashkent - 1972. B.627[3]
4. N.A. Agadjanyan, L.Z Tel, V.I. Tsirkin, S.A. Chesnokova. "Physiology Cheloveka" Moscow - Meditsinskaya kniga N. Novgorod. Izdatelstvo NGMA 2003 S.252[4]