



## MYOCARDIAL ARRHYTHMIA ASSOCIATED WITH THE NERVOUS SYSTEM AND THE STATE OF OTHER ORGANS PATHOLOGICAL PROCESS

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### Annotation

This paper discusses how arrhythmia affects the organs of the central nervous system, diagnosis, symptoms and treatment of this disease, the main approach to studying patients during attacks of arrhythmia discusses the prescription of drugs for cardiac arrhythmia and ECG signs in arrhythmia.

**Keywords:** Arrhythmia of various origins, ECG data in arrhythmia, IHD, Angina pectoris, Potassium ions in arrhythmia, The effect of beta - adreno - blockers on arrhythmia.

### Relevance

According to WHO statistics, the incidence rate of the cardiovascular system in 2010-2020 was 55.6%, now these statistics show that in 2020-2022, diseases of the cardiovascular system have doubled. This is all connected, various external factors, it can be exogenous factors - chemical, biological and radiation environment, endogenous factor - this is when changes occur in the body itself, the pathological process develops in several organs, for example, the patient suffers from coronary artery disease (ischemic heart disease) and he has 6 reasons see a doctor 1. Shortness of breath - shortness of breath 2. Pain in the heart area - similar to angina pectoris 3. Fatigue - after physical exertion 4. Drowsiness 5. Heart rhythm disturbances - Arrhythmia 6. Dizziness and another symptom in IHD is anemia, with By this indication I can say that the disease of one tissue will affect another organ or cell disrupts its function. Now the current issue is the state of a person in arrhythmia and its closely related to the central nervous system?

Arrhythmia is a violation of heart rate, automatism and a violation of myocardial contraction and ion conduction. The first change began to occur in the sinus node,





then the atrioventricular node is transmitted, then the GIS bundles and the Purkinje trail. The pericardium of the heart consists of capillaries, lymph nodes and nerves. From here comes the vagus nerve from the central nervous system and peripheral nerves from the medulla oblongata, which stimulates the myocardium of the heart. In a pathological process, for example, emotional excitation, the vagus nerve receptors are excited and transmitted through the periphery to the muscle tissue, and there myocardial oscillations occur from here, the rhythm of the myocardium is disturbed, a whole complex of potassium ions exit from the myocardium, in the ECG, the P wave is expanded, extrasystole occurs over the ventricles - dysfunction of the sinus node. We said that in arrhythmia, the conduction of the sinus node is disturbed; from here, several types of violation of the sinus node are distinguished.

1. Sinus Tachycardia	Heart rate-90 min/sec more	Elevated prong - P	Repolishing The ventricles are elevated	<b>Origin-physiological or pathological</b>
2. Sinus Bradycardia	Heart rate-60min/sec less		Increased vagal tone	Physiological or pathological
3. Sinus Arrhythmia	Fluctuations in the tone of the vagus nerve.	Changes to happen		Pathological

We now see a particle of arrhythmia change if it speaks of the classification of arrhythmia, then they are divided into several types: Paroxysmal tachycardia, Atrial fibrillation (Ventricular and supraventricular), Atrial flutter, SSS (Weak Sinus Node Syndrome), Blockade A-B connected. [1]

**Paroxysmal tachycardia** - pathological origin, pulse per minute - 140 beats / min. Violations of the conductivity of K + ions. Paroxysmal tachycardia is the most dangerous type of arrhythmia, because it occurs suddenly, paroxysmal. PT- can occur during pressure surges or psycho-emotional overstrain. [5]

**SSSU** - occurs with dysfunction of the sinus node. SSSU are divided into two types: ventricular and supraventricular.

### **Purpose of the Study**

For the purpose of the study, I would like to say how b-blockers affect arrhythmia? and what medications can be prescribed for arrhythmias, what works better against arrhythmias? and Electrocardiography data for various types of arrhythmia? In the





supervision of my patients during the ECG study, I discovered arrhythmia of the heart, there were 5 of them. Complaints were difficulty in breathing, pain in the chest, behind the sternum, tinnitus cited by hot weather or stressful conditions, pallor of patients due to anemia, fast or slow irregular heartbeat, heart pounding or /jumps out of the chest/, in places dizziness, disturbances of microcirculation of the central and peripheral vessels. The pain can be aching, stabbing, burning. [3]

1. The first patient - D.Zh. age 69 years, diagnosis - sinus bradycardia.
2. The second patient - P. P, age 25 years, diagnosis - sinus tachycardia.
3. The third patient - S.S., age 51, diagnosis - atrial flutter.



4 and 5 of my patients also have the same symptoms of morbidity. After lengthy examinations, I started treating my patients with various phyto and synthetics, as well as potassium containing medicines and products. Patients who are 69 and 51 years of age, in addition to arrhythmia, have Arterial Hypertension, of course, at that age, hypertension is already a natural phenomenon for many of the world's population. And the second patient suffers from craniocerebral hypertension. In a patient with sinus tachycardia, AH 180/100 at that moment the patient's state of health is poor. He urgently needs antiarrhythmic and antihypertensive drugs,  $\beta$ -adrenergic blockers (bisoprolol, oxyprolol, farmadipine, panangin, amiadarone, ritmonorm), as well as sedatives. The mechanism of b-adrenergic blockers is that they relax the muscles of the heart, reduce the production of adrenaline over the kidney, block adrenergic and cholinergic receptors. There are two types of b-blockers, b-1 and b-2 blockers. I said the mechanism of b-1 blockers in the upper part of the text, and the mechanism of b-2 blockers they affect the bronchi, because of which they expand the walls of the bronchi and relieve the narrowing of the bronchi, but they have the same effect, they are both types as a muscle relaxant. A 51-year-old patient has a craniocerebral pressure echo of 12.8 (the norm in adults is 7-9), ECG data showed arrhythmia. A general blood test in the walls of blood vessels formed atherosclerotic plaques, calcium crystals and blood clots. Blood clotting - thick blood. All these studies have shown that it is necessary to urgently help the patient 1.



It is necessary to dissolve atherosclerotic plaques, the drug - Roxera will help 2. It is necessary to thicken the blood - for this trombonet 3. It is necessary to lower HMI - piracetam 4. It is necessary to improve the microcirculation of the brain for this - Migrenaz-L ( plant-based composition) and Panangin for arrhythmias. After the assistance provided with medications, the patient's condition improved slightly, but only the patient's medications cannot be treated with a complex of therapeutic products. Also, as a complex of therapeutic products, you can take potassium-containing foods, the patient needs proper nutrition, you need general strengthening foods for the heart. For example, it has been proven in studies that tomatoes are the best vegetable for the cardiovascular system. Because the composition of tomatoes includes vitamin K and B, Minerals (Magnesium, calcium, potassium, phosphorus, iron, silicon and iodine), proteins and carbohydrates. As well as various oatmeal, buckwheat, cotton grains, it strengthens the heart. What foods are not allowed for arrhythmias? Avoid foods with saturated fats and trans fats, it is better to eat more fruits, vegetables, lean meats and fish. [7]

### **Research Method**

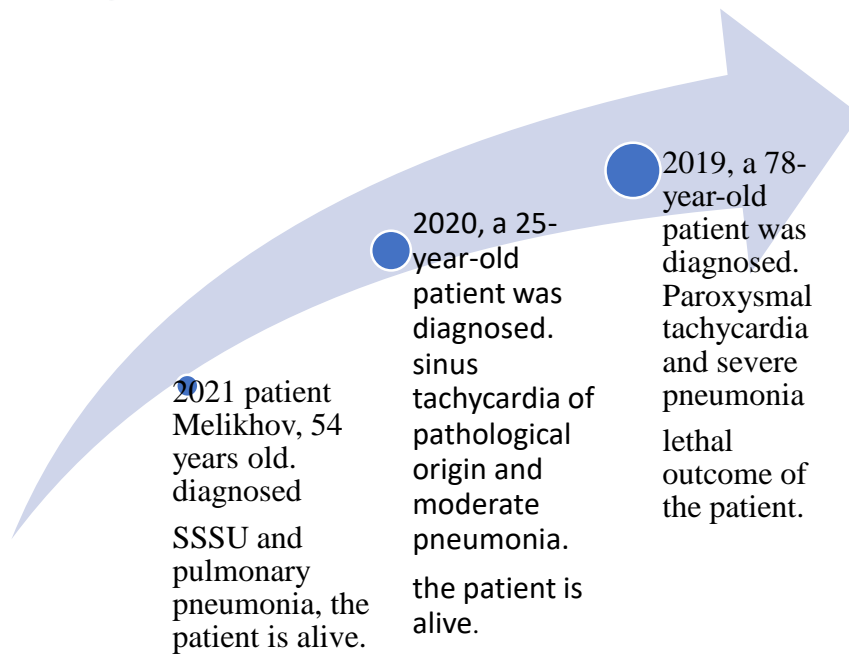
Diseases of the cardiovascular system and the central nervous system are interconnected. A patient, for example, suffers from craniocerebral hypertension (12.8) and secondarily he suffers from coronary artery disease - Coronary heart disease. When we measure the patient's hemoglobin, the hemoglobin is low, anemia syndrome occurs. Also, hypoxic state of the brain, severe headache, O<sub>2</sub> deficiency in the heart and brain. Studies have shown that anyone with HMG can take Cavinton tablets, but if the patient has a severe form of coronary artery disease, then Cavinton is contraindicated. In severe cardiac arrhythmias and in acute hemorrhagic stroke, it is also contraindicated. [2]

### **Research Results**

Since 2000, the number of deaths from cardiovascular diseases has increased by more than 2 million and reached almost 9 million in 2019. Heart disease now accounts for 16% of all deaths in the world. More than half of the two million additional deaths from cardiovascular disease have been reported in the WHO Western Pacific Region. At the same time, the European Region saw a 15% relative reduction in deaths from heart disease. [3]

Statistics of patients suffering from arrhythmias during COVID-19, dead and surviving by age category:





## Conclusion

In conclusion, I would like to add that arrhythmia is a serious pathological process that occurs in adulthood or childhood. Many diseases go away with arrhythmia, for example: arterial hypertension is a common case, sympatho-adrenergic neurohumoral disorders, metabolic disorders, acid-bile metabolism disorders, ischemic heart disease in a frequent case, myocardial infarction, unstable angina pectoris, cardiomyopathy, acquired and congenital heart defects, myocarditis. In arrhythmias, conduction disorders are divided into two stages:

1. Increased conduction (Wolf Parkinson White Syndrome)
2. Decrease in conductivity (blockade: sinoauricular, blockade of the legs of the bundle of His) [12]

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