



## Arrhythmia

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**Summary:** In this article, I touched on one of the open topics in medicine, like arrhythmia. Many people require specialized cardiac care. 70-80% of people over the age of 50 begin to suffer from arrhythmia

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### Briefly about the disease

Cardiac arrhythmia is a pathology associated with a violation of the rhythm, frequency and sequence of heart contractions. The disease can be a consequence of both diseases of the heart itself and disorders in the work of other organs and systems. Heart failures are very dangerous, as they can cause both serious health problems and the death of the patient. That is why the treatment of arrhythmia should be started as early as possible, when the first attack occurs. One should not think that it is an isolated one and will never happen again.

### Symptoms

The symptoms of arrhythmia largely depend on its type and are determined by the rhythm and heart rate.

The main signs of the pathological condition include:

- Feeling of interruptions in the work of the heart
- Increased heartbeat
- Weakness
- Dizziness

In some cases, seizures are accompanied by suffocation, fainting and general discomfort.

Important! In some cases, "mute" arrhythmias are diagnosed. With this pathology, the patient does not experience any symptoms. The disease is detected by chance, usually when passing an ECG during a medical examination or diagnosis of other pathological conditions.

**Reasons**

The main causes of cardiac arrhythmia include functional disorders of regulation and anatomical changes. Very often, rhythm disturbances are a sign of the disease.

Arrhythmia can be triggered:

- Coronary heart disease
- Injuries
- Surgical interventions
- Heart defects
- Myocarditis, etc .

There are also third-party (non-cardiac) factors that can cause rhythm disturbances.

These include:

- Addiction to drinks and foods containing large doses of caffeine
- Passion for energy drinks
- Excessive alcohol consumption
- Frequent smoking
- Stress
- Metabolic disorders
- Fungal infections
- Excessive physical activity
- Infections
- Menopause
- Pathologies of the brain

In most cases, the causes of cardiac arrhythmia are quickly established, which allows immediate treatment. In some situations, it is impossible to identify factors contributing to the development of pathology. Such conditions are called idiopathic.

**Classification**

Today, experts have identified several types of arrhythmias:

**Sinus tachycardia.** With this pathology, the heart rate is more than 90 beats per minute. The patient experiences unpleasant sensations, he literally feels how hard his heart is beating. Some call this condition "the heart jumps out of the chest"

**Sinus arrhythmia.** With this pathology, heart contractions alternate incorrectly. Usually this form of the disease is diagnosed in children and adolescents

**Sinus bradycardia.** This pathology is characterized by a pulse rate of less than 55 beats per minute and can occur even in absolutely healthy people in a dream or at rest

Atrial fibrillation. This pathology is characterized by a regular rhythm with a very rapid (up to 240 beats per minute) heartbeat. Patients suffer from weakness, increased sweating. Some patients with an attack fall into a pre-fainting state

Paroxysmal tachycardia. With this pathology, the heart rate increases (up to 140-220 beats per minute). The attack suddenly begins and ends just as quickly

Extrasystole. This pathology is characterized by premature contractions of the heart. The patient during the attack feels fading or tremors of the heart muscle

### **Arrhythmia during pregnancy**

Pregnancy is a special state of the body, which is characterized by various changes in the work of both individual organs and entire systems. While carrying a child, a woman may also encounter cardiac arrhythmias. Almost 20% of pregnant women, for example, have tachycardia and extrasystole. At the same time, it is impossible to talk about heart pathologies.

If you suffer from a disease, but still want to become a mother, you should:

- Strictly follow all the doctor's recommendations
- Observe the rest and work regime
- Take all prescribed medications
- Timely undergo therapy in a hospital

Childbirth in women with arrhythmia usually takes place in specialized departments, where immediate care is possible for cardiac pathologies.

### **Diagnostics**

Diagnosis of cardiac arrhythmia, as well as treatment, is always carried out comprehensively.

The survey includes:

- Audition at the first reception
- Passing an ECG
- Blood and urine tests

The initial examination allows you to determine the heart rhythm, sequence and heart rate, the general state of health of the patient, the presence of factors that could provoke the development of a pathological condition.

If the arrhythmia occurs spontaneously and does not depend on activity and time of day, Holter monitoring is carried out. This technique consists in round-the-clock recording of the heartbeat with the help of special equipment. Studies are also conducted under load (on a treadmill or other simulator).

Other studies may be conducted to clarify the diagnosis and identify the causes of pathology.

These include:

- Ultrasound of the heart
- Vascular Dopplerography
- Echocardiography, etc.

If necessary, the patient is referred for consultation to other specialists (endocrinologist, gynecologist, etc.).

### Treatment

Treatment of cardiac arrhythmia is always carried out in accordance with:

- The cause of pathology
- A form of rhythm disturbance
- The general condition of the patient
- Identified concomitant pathologies

In some cases, it is very important to correct the underlying disease. Only then can therapy be carried out directly.

Medical treatment of cardiac arrhythmia

Therapy is carried out with the use of drugs such as:

- Calcium and sodium channel blockers
- Beta blockers
- Vitamin complexes
- Means to improve the functioning of the entire cardiovascular system

Important! It is strictly forbidden to make independent attempts at therapy! Arrhythmia, which is treated at home, can provoke serious complications and even cause the death of the patient.

Cardiac arrhythmia: treatment by surgical intervention

Operations are performed in cases when medical techniques do not give the desired result, and with pronounced changes in the work of the heart.

Today can be held:

- Electrocardiostimulation, implying an electric shock to the heart muscle
- Implantation of a special device for heart rate regulation
- Catheter ablation, in which sources of false impulses are cauterized and the heartbeat is normalized

Important! Treatment of cardiac arrhythmia, regardless of the causes, is carried out only by a cardiologist. Even standard drugs are often selected under the supervision of a specialist. In severe cases, the selection of medicines is carried out in a hospital setting. The patient's condition is constantly monitored, numerous examinations are regularly carried out. This allows you to prevent deterioration of well-being and the occurrence of complications, significantly reduces the risk of death of the patient.

### Prevention

To prevent arrhythmia, it is necessary:

- Regularly perform morning exercises or simple sets of exercises during the day
- Stick to a proper diet.

It is important to saturate the body with the whole complex of nutrients, to eat fully and in a variety of ways. At the same time, it is necessary to abandon fried, salted and smoked food, which gives an additional load on the body

- Maintain a normal weight
- Monitor blood pressure levels
- Give up bad habits
- Track sugar levels
- Lead a quiet lifestyle, avoiding stress
- Observe the work and rest regime

It is very important to regularly consult a doctor and undergo at least a minimal examination that allows you to determine the general condition of the body and the existing risk factors for the development of pathological moments.

When the first signs of arrhythmia appear, you need to make an appointment with a cardiologist.

### Effects

Any arrhythmia can be complicated by such pathological conditions as ventricular flutter and fibrillation. These conditions are equal in severity to circulatory arrest and can lead to the death of the patient. In the first seconds of the attack, weakness develops, the patient experiences dizziness. Then he loses consciousness, convulsions occur. During an attack, breathing stops, and the pulse and blood pressure are not recorded. Clinical death occurs. If resuscitation is not performed, the patient will die.

Complications of arrhythmia are especially dangerous for patients with chronic circulatory insufficiency. During an attack, the patient experiences shortness of breath and may develop pulmonary edema.

Thromboembolic complications associated with clogging of important arteries are also common. Such conditions lead to a brain stroke.

### Forecast

Arrhythmias that are not associated with organic cardiac pathologies are not a threat to the health and life of the patient. The forecast for them is always favorable. The patient can live with this form of the disease, often without even noticing it (if he adheres to all the recommendations of the doctor). Atrial fibrillation and a number of other forms are dangerous because they can provoke severe pathologies, including not only heart failure, but also stroke. Atrial flutter and ventricular fibrillation are an immediate threat to life. The prognosis for such pathologies is the most unfavorable. In numerous cases, without proper supervision by a doctor, the patient dies.

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