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#### **HYPERTENSION**

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Annatation. Hypertension is a condition in which the blood pressure level is consistently elevated, which is recorded by repeated measurements. High blood pressure is an accompanying factor in many diseases and can cause complications in the cardiovascular system. Hypertension requires constant monitoring and drug treatment. In the modern clinic "Medcenterservice" you can undergo a full examination, if necessary, the doctor will select an effective therapy. Types of arterial hypertension. The most common mixed form of hypertension, in which both systolic and diastolic pressure increases. Less often, only one type of blood pressure increases, which is typical for older people.

**Key words:** Hypertension, blood, diastolic, essential, pathology

According to the cause of occurrence, there are 2 types of arterial hypertension:

1. Primary or essential. It is impossible to establish the exact cause of the disease, since there are no pathologies that could provoke an increase in pressure. Most often, essential hypertension occurs due to stress, a sedentary lifestyle, and as a result of genetic predisposition. 2. Secondary. A consequence of other diseases, it is possible to accurately determine the cause of high blood pressure. In most cases, secondary hypertension develops when a person has kidney disease.

Depending on the level of systolic and diastolic pressure, there are 3 degrees of hypertension:

- $\Box$  Grade 1. It occurs in a mild form, there is an increase in systolic blood pressure to 140 mm Hg, diastolic up to 90 mm Hg.
- □ Grade 2. Moderate, the pressure increases to 180/110 mm Hg. Organic lesions of the cardiovascular system may be observed.
- □ Grade 3. There is an increase in systolic and / or diastolic pressure to 200/115 mm Hg. This condition can cause serious complications, since the blood supply to the internal organs is disrupted.

Complications

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With a long or severe course of hypertension, complications may occur. Among the most dangerous are:

- 1. Brain damage, which develops into a stroke. The consequences of the disease are unpredictable, and the rehabilitation period takes a long time.
- 2. Diseases of the heart and circulatory system myocardial infarction, arterial aneurysms.
- 3. Kidney disease. Against the background of arterial hypertension, renal failure may develop, an imbalance in the volume of salt and fluid in the body occurs.

A common complication is hypertensive crises. Periodic short-term increases in pressure are accompanied by severe headache, vomiting, and rapid heartbeat.

Diagnosis and examinations for high blood pressure. Hypertension can lead to serious complications, so it is important to diagnose the disease in a timely manner. First, you need to measure your blood pressure and examine the so-called target organs.

Steps needed to diagnose hypertension and calculate the severity of the disease:

- 1. Measuring blood pressure independently periodically at home, in the doctor's office.
- 2. Taking blood and urine tests.
- 3. Assessment of the work of the heart muscle is performed using a phonendoscope or more detailed by means of an ECG or ultrasound of the heart.
- 4. Dopplerography allows you to assess the state of blood flow through the vessels to the heart.
- 5. Arteriography allows you to see the state of the arterial walls.
- 6. Examination of the fundus is necessary at the initial stage of hypertension. With an increase in pressure, the veins of the retina of the eye expand, and the arteries narrow.
- 7. Ultrasound of the kidneys and adrenal glands the study allows you to assess the work of the kidneys, identify damage to the renal tissue.

To prevent hypertension, you need to follow a number of simple recommendations:

- 1. Regularly measure your blood pressure, keep a diary with its readings. Even a small deviation of 10 mm Hg in systolic or diastolic blood pressure, if this happens regularly, can become an alarm bell.
- 2. Monitor your lifestyle physical activity, nutrition, eliminate bad habits.
- 3. Get checked by a doctor regularly.

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Compliance with these simple rules will help minimize the risks.

Rules for measuring blood pressure to diagnose arterial hypertension

To get an objective picture when measuring blood pressure, it is important:

- 1. At least half an hour before the procedure, stop smoking, drinking tea, coffee, alcoholic and other stimulating drinks, eating, physical activity.
- 2. When measuring blood pressure, take a comfortable position and do not cross your legs.
- 3. The pressure gauge should be at heart level.
- 4. To minimize errors, it is recommended to repeat the procedure 2-3 times.
- 5. The difference between the readings on the left and right hand can be 10 mm Hg or even 20 mm Hg.

To get an objective picture, regularly measure your blood pressure at home and enter the data in a diary.

Hypertension is one of the most common diseases among people of different ages. Therefore, it is important to take a responsible attitude to your health and periodically undergo examination by a doctor.

Causes of hypertension. Sometimes blood pressure can increase even in an absolutely healthy person - this is a natural reaction of the body to stress and physical activity. If, in a calm state, at least three control measurements show an increase in blood pressure to 140/90 mm Hg or more, there is a possibility of a diagnosis of hypertension.

The disease develops due to a violation of the mechanisms that regulate blood pressure. There are several reasons that provoke an increase in blood pressure:

- 1. Congenital or acquired renal arterial hypertension. When renal blood flow is disrupted, the kidneys secrete an increased amount of a substance called renin into the body. As a result, small vessels spasm, vascular walls gradually thicken, and excess fluid is retained in the bloodstream. The described processes increase the load on the heart and provoke an increase in blood pressure.
- 2. Nervous strain. Stress and chronic fatigue often lead to the development of hypertension.
- 3. Hormonal imbalances and metabolic disorders. Lead to disruption of blood circulation in tissues.

Often, high blood pressure is observed with age. For people aged 20–40, normal pressure is 120/70–130/80 mm Hg, 40–60 years old — 140/90 mm Hg, over 60 years old — 140/90–150/90 mm Hg.

A fairly common cause of pathology is heredity. Also, factors that provoke high blood pressure include:

$\square$ smoking and drinking alcoholic beverages;
□ sedentary lifestyle;
□overweight;
poor nutrition.

If a person has at least one of the above risk factors in their medical history, it is recommended to undergo regular medical examinations and take all the necessary tests. It is important to consider that hypertension at an early stage can develop without pronounced symptoms.

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