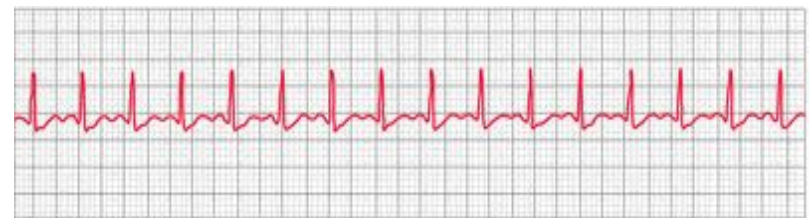
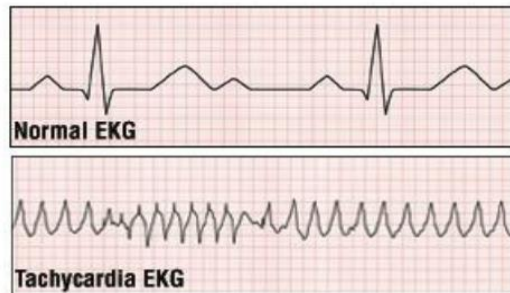


Tachycardia

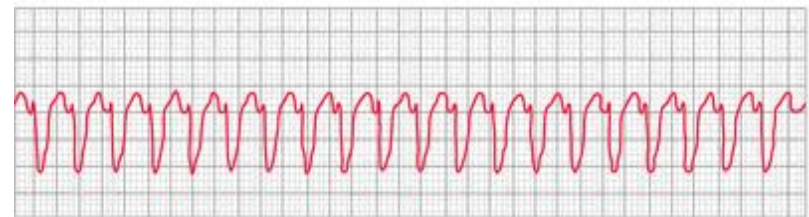
Tachycardia is a type of arrhythmia characterized by a heart rate of more than 90 beats per minute. A variant of the norm of tachycardia is considered with an increase in physical or emotional load.

Pathological tachycardia is a consequence of diseases of the cardiovascular or other systems. It is manifested by a feeling of heartbeat, pulsation of the vessels of the neck, anxiety, dizziness, fainting. It can lead to the development of acute heart failure, myocardial infarction, coronary artery disease, heart failure.

Tachycardia (rapid heart rate)



Sinus tachycardia



Ventricular tachycardia

Cyanosis

Cyanosis-cyanotic color of the skin and mucous membranes, due to the high content of hemoglobin in the blood. From a clinical point of view, the presence of cyanosis indicates the likelihood of tissue hypoxia. Detection of abnormal hemoglobin.

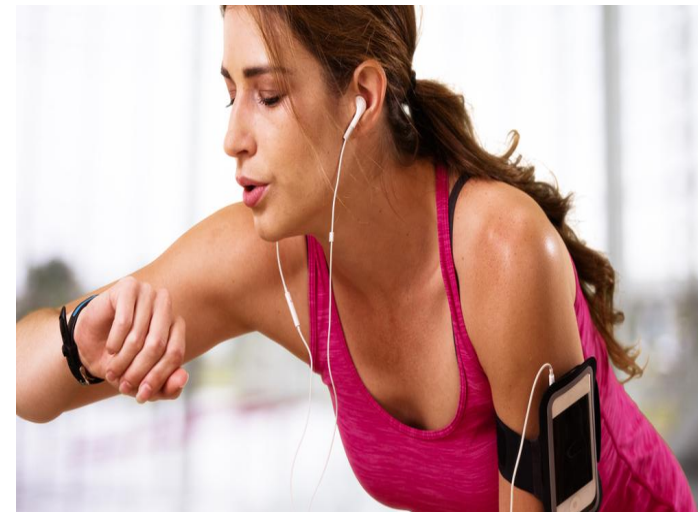


Types of cyanosis

- Central cyanosis is often due to a circulatory or ventilatory problem that causes a decrease in blood oxygen in the lungs. It develops when arterial oxygen saturation falls below 85% or 75%.
- Peripheral cyanosis-a blue tint in fingers or extremities due to inadequate or obstructed circulation. Blood reaching the extremities of poor oxygen and when viewed through the skin, a combination of factors can lead to the appearance of blue. All factors contributing to Central cyanosis can also cause peripheral symptoms, but peripheral cyanosis can be observed in the absence of heart or lung failure. Small blood vessels may be restricted and can be treated by increasing the normal level of blood oxygenation.
- Differential cyanosis is a bluish color of the lower, but not the upper limb and head. This is observed in patients with duct patent. Patients with large duct develop progressive pulmonary vascular disease, and right ventricular pressure overload occurs. As soon as the pulmonary pressure exceeds the aortic pressure, the shunt is reversed (from right to left). The upper limb remains pink, as the brachiocephalic trunk, the left common carotid trunk and the left subclavian trunk are given proximally to the PDA.

Tachypnoea

- Tachypnoea is rapid shallow breathing, not accompanied by a violation of its rhythm. Tachypnea is a subjective type of inspiratory dyspnea (see), which is not accompanied by objective signs (forced body position, cyanosis, participation in the act of breathing of auxiliary muscles). In healthy people, tachypnea can be observed during physical work or nervous excitement.
- The most common cause of tachypnoea is a violation of the functional relations of the cortex with the underlying parts of the Central nervous system, with the emergence of so-called neuroses of the respiratory system. In hysteria tachypnea is manifested by increased number of breaths to 100 and more in 1 min and resembles a "dog breath".
- Tachypnoea can be observed in some poisonings as a result of exposure to the respiratory center of unoxidized metabolic products, pain in the chest and abdomen, limiting respiratory movements.
- Tachypnoea is also observed with an increase in body temperature.



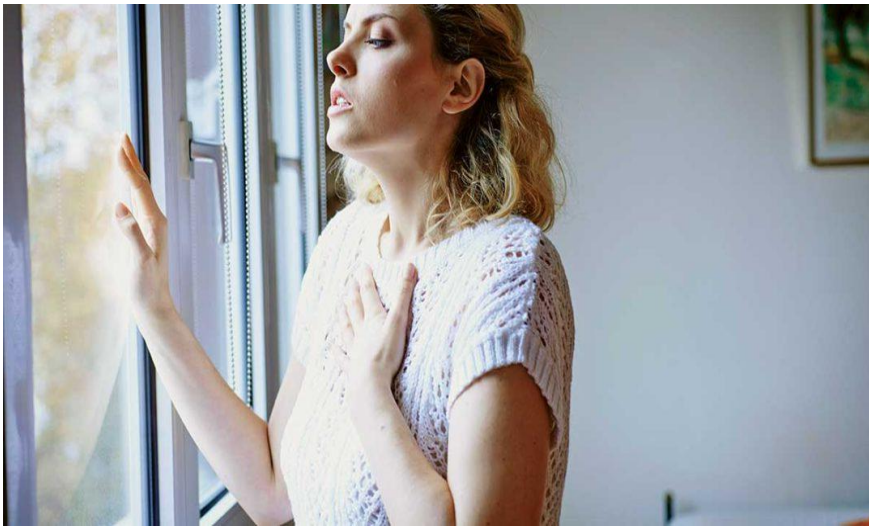
Dispnea

- Shortness of breath is a reaction of the body in response to insufficient oxygen supply to the blood (hypoxia). It is manifested by a painful feeling of lack of air, tightness in the chest in combination with a compensatory increase in the frequency and depth of respiratory movements. As a rule, it is combined with increased heart rate.



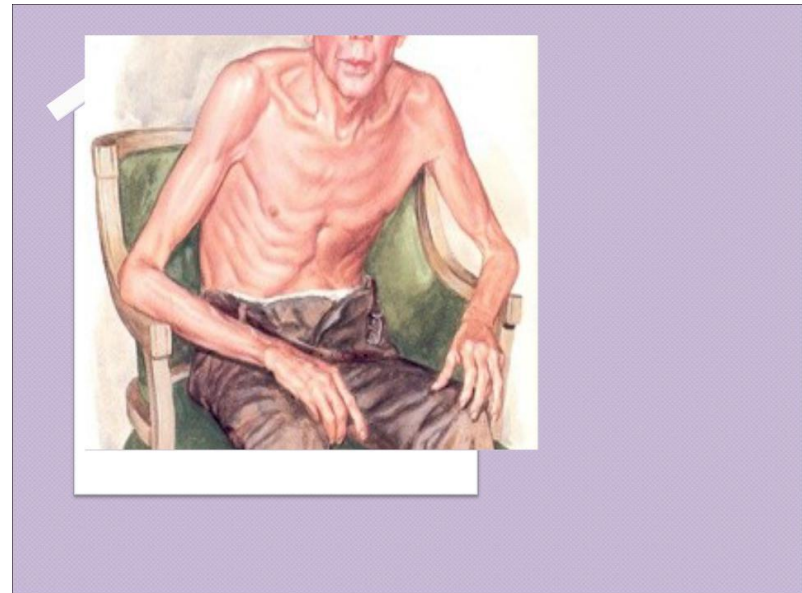
Types of dyspnea

- Inspiratory-difficulty breathing
- Expiratory shortness of breath on exhalation
- Mixed



Orthopnea

- Orthopnea is a severe shortness of breath associated with stagnation in the small circle of blood circulation, in which the patient can not lie, is forced to sit. When sitting, venous stagnation moves to the lower extremities, while the blood filling of the small circle decreases, the work of the heart is facilitated, gas exchange, oxygen starvation is reduced. The head end of the patient's bed should be raised or the patient needs a chair.



Collapse

- Collapse is an acute vascular insufficiency characterized by a drop in arterial and venous pressure and a decrease in the mass of blood circulating in the vascular system.



Пониженное давление может привести к обморокам - тревожному симптому, который сигнализирует: «Следует срочно обратиться к врачу».



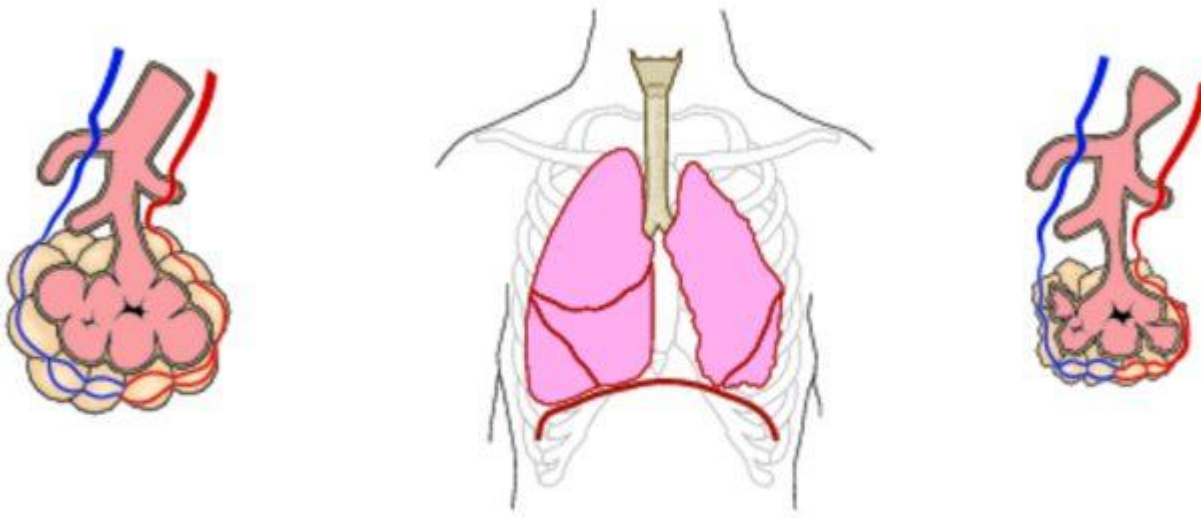
Types of collapse

- Hemorrhagic - there is massive blood loss.
- Toxic-infectious - It can occur in infectious diseases, the pathogens of which are characterized by the presence of endotoxins released during the death of a bacterial cell. These endotoxins have a paralyzing effect on the muscular apparatus of the vascular wall, and with the massive death of microorganisms, they are released in large quantities and can cause a state of collapse.
- Pancreatic - It occurs with severe abdominal trauma, leading to the crushing of pancreatic tissue, as well as acute pancreatitis.
- Orthostatic - It occurs when a sharp transition from a horizontal to vertical position after a long, multi-day bed rest.
- Anoxic - Occurs with a rapid decrease in the partial pressure of oxygen in the inhaled air due to the advancing oxygen starvation of tissues, the tone of the smooth muscles of the vessels falls, and then the development of collapse is based on the mechanisms already disassembled above



Atelectasis

Atelectasis is a pathological condition characterized by the fall of part or all of the lung. This area is switched off from the gas exchange, the respiratory surface of the lungs to some extent decreases, there are symptoms of respiratory failure. Atelectasis can develop at any age, even in utero.



Types of atelectasis

Depending on the origin, there are 2 types of lung atelectasis:

- Congenital, or primary (in the intrauterine period, the lungs are in a sleeping state, since the fetus does not breathe; normally, after birth, the baby takes the first breath and the lungs are straightened, if this does not happen and a separate part or all of the lung is not straightened, this is the primary atelectasis);
- Secondary, or acquired (lung tissue that has previously participated in the act of breathing subsides).
- Also, there are forms of atelectasis, which are not pathology. It
- Atelectasis intrauterine-the very condition of the lungs of the fetus; they are not used by the body before birth, so they are in a state of sleep and "wait" for the first breath of the newborn to finish;
- Atelectasis physiological-sometimes this condition is found in some healthy people; it is not dangerous and is, in fact, a functional reserve of the lungs.

