

ANATOMICAL AND PHYSIOLOGICAL FEATURES OF THE CARDIOVASCULAR SYSTEM

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The aim of the study Analyze anatomical and physiological features of cardiovascular system in relation with its functions.

Materials and methods. Materials are taken from the archives of the department. The study was conducted on the samples in the department of human anatomy.

Obtained results.

1. The walls of the heart are formed by three membranes: the inner connective tissue (endocardium), the average muscle (myocardium), the outer epithelial (epicardium).

2. Outside the heart is surrounded by the flexible sac - pericarditium, which prevents heart hyperinflation when filling with blood. Between the pericardium and the heart is the fluid that reduces friction reduction. It consists of two atria and two ventricles. The left and right sides are separated by a solid wall of the heart.

3. The thickness of the myocardial cells differs depending on the fulfilling task. Atria perform a little work, pumping blood into the ventricles, so they have a very thin muscle layer. The right ventricle pumps the blood through a small circle of blood circulation, that is why its a wall is thicker than the atria's one. The left ventricle provides blood flow through the systemic circulation, it has the greatest thickness of the myocardium.

4. The heart has a clap valve located between the atria and ventricles, and prevent the blood return in the atria during ventricular contraction. Semilunar valves are located at the exit of vessels from the heart and prevent the return of blood from the blood vessels into the ventricles when they relax.

Conclusions:

Structure of the heart completely corresponds to its function: the myocardium provides the possibility of reductions; a solid septum between the left and right halves of the heart provides separating blood into arterial and venous; a valve system provides blood flow in one direction.

STRUCTURAL FEATURES OF SOME NERVE PLEXUSES OF THE ABDOMINAL CAVITY AT 37-40 WEEKS OF GESTATION FETUSES AND NEWBORN

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The purpose. The problem of detailed studies of the anatomy of the human's peripheral nervous system, in particular the structural organization of its autonomous

(vegetative) part, today it attract the attention of specialists of theoretical and practical medicine.

Materials and methods. The material for the study is based on complex internal reproductive organs of the fetus 37-40 weeks (9) and female newborns (9 who died from diseases that are not associated with pathology of genitalia.

Results. During development from 37 to 40 weeks' gestation dislocation of celiac plexus down was found - in fetuses of 37 weeks, it is at the level of XII thoracic vertebra, in fetuses 40 weeks - at the level top of the I lumbar vertebrae. Renal and aortico-renal ganglia are connected to each other by delicate nerve fibers that form the renal plexus. It should be noted that some macro-microscopic preparations one of the renal ganglia fibers begins that run to the ovarian artery and form ovarian plexus around it. Abdominal aortic plexus fetuses 37-40 weeks of gestation and newborns are formed. Ganglionic thickening are seen in places of connection branches of sympathetic trunk to the abdominal aortic plexus. Aortic plexus is a continuation of the celiac and superior mesenteric plexuses, in the nerve nodes of which originate nerve fibers, which continue with nerve plexuses as two trunks, which located on both sides of the aorta.

Conclusions. Nervous ganglia, giving rise to the ovarian plexus are located along the aortic plexus, on the right and left of its trunks, between the renal and inferior mesenteric arteries, at the junction of the branches of the sympathetic trunk to the border of aortic plexus.

СРАВНИТЕЛЬНАЯ ХАРАКТЕРИСТИКА ЯИЧНИКОВ ПЛОДОВ И НОВОРОЖДЕННЫХ Жарова Н.В.

Морфологию яичников плодов и новорожденных изучали главным образом применительно к патологии новорожденных и патологической беременности. Линейные размеры яичников плодов и новорожденных находятся в непосредственной зависимости от срока гестации и массы тела, подвержены значительным колебаниям и достаточно противоречивы. Имеются данные, указывающие на зависимость морфологических показателей яичников новорожденных от массы и причин смерти новорожденных. У новорожденных и детей до 1 года жизни встречаются яичники с гладкой поверхностью и сформированной белочной оболочкой и с бугристой поверхностью, у которых имеются лишь фрагментированные участки на поверхности органов

На основании проведенного исследования отмечено, что яичники плодов 37–40 недель и новорожденных человека представлены в виде продолговатых тел различной формы, которые располагаются по обе стороны матки, прикрепляясь к заднему листку широкой связки матки. С маткой связаны с помощью собственной связки яичника и широкой связки матки, со стенками таза – при помощи подвешивающей связки яичника. К правому яичнику сверху