

Materials and methods. The material for the study was the female internal genital organs 10 complexes (18–40 years) who died from diseases not related to pathology of the reproductive system. To fulfill the research goal, a set of methods was used, which included anatomical preparation, injection of the uterine arteries with subsequent corrosion. To study the spatial distribution of the arterial bed of the uterus, the vascular bed was injected through the uterine arteries using a syringe and cannula with an injection mass based on the self-hardening dental plastic Protacryl M followed by preparation of corrosive preparations. After injection of dental plastic through the uterine arteries, the uterus with fallopian tubes and ovaries was placed in an acid solution for one day.

Results. The uterus is supplied by two pairs of uterine and ovarian arteries, small branches of the ovarian arteries and arteries of the uterine round ligaments. In 60% of cases, the uterine arteries were branches of the front trunks of the internal iliac arteries. In a number of observations, the uterine artery was a branch of the non-obliterated part of the umbilical artery (27%), inferior vesical (3%), middle rectal arteries (2%), and in rarer cases it could depart with a common trunk with the umbilical (1.8%), internal genital (1.6%), upper gluteal (1.6%), lower gluteal (1.6%) and superior vesical arteries (1.4%). When analyzing the corrosive preparations of uterine arteries in mature age women, it was found that the uterine artery spirally rises along the uterine body, departing from it 0.2-0.9 cm, in the thickness of the lateral perimetrium. Throughout its length, the uterine artery formed branches of various shapes. The ascending uterine artery, in most cases, had bends in the frontal, sagittal, planes. At the level of the internal orifice of uterus, the uterine artery formed the largest number of branches. Uterine artery gave in the thickness of the uterus 10-15 branches of the first order, with a third of the branches moving from the convex surface of uterus, and most of it from the concave surface of the uterine artery. The branches of the ascending uterine artery, corporal arteries, penetrated the uterine wall in an oblique direction at the level of the internal orifice of the uterus, and at level of the body area in the transverse direction relative to the longitudinal axis of the uterus.

Conclusions. Identified different anatomical variation of uterine arteries, right and left sided, the same like anteroposterior asymmetry in the arterial blood supply of the uterus by corrosive bodies of the uterine arteries should be taken into account when performing surgical approaches on the uterus.

Key words: uterine artery, types of anatomical peculiarities

263. THE CLINICAL ANATOMY OF THE ARTERIAL COLLATERALS OF THE LOWER LIMBS

Author: **Elena Smochină**

Co-authors: Scripnic A., Călugăreanu M.

Scientific adviser: Vişnevschi Sergiu, PhD, University Assistant, Department of Topographic Anatomy and Operative Surgery, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. The purpose of this research is anatomical-clinical selective study of arterial vascularization of the lower limbs, development of arterial collateral, the impact of occlusive arteriopathy in their development and their appearance at CT-high performance imaging investigation.

Aim of the study. The anatomical-clinical study of the arterial collaterals of the lower limbs and their importance for maintaining the function of the lower limbs and preserving their anatomical

Materials and methods. As study material were the results of CT-imaging investigations with contrast, in angiographic regime and 3D reconstructions.

Results. 3 main aspects were demonstrated: 1. The appearance of the arterial circulation in the lower limb, as usual; 2. Changes induced by partial and total vascular obstruction with limb amputation; 3. Restoring vascularization from other arterial branches. These result have obviously been pointing out of the fact that the vascular insufficiency is a chronic process, with progressive structural changes, it show us different degrees of affectation – from the light calcified with unique stenoses to the total occlusion with limb amputation and the defining role of the collateral vessels through wich the blood flow is redirected and ensures the tissue perfusion.

Conclusions. Peripheral arterial occlusive disease presents a high risk of morbidity, affecting 10% of the world's western population the past 50 years. It affects complex the patient with the involvement of the physical life, mental life and social integration. These issues are of particular importance for clinicians and radiologist alike. The most common location of arterial obstructions is at the level of the superficial femoral artery. Ensuring vascularization through the collateral under certain critical conditions like interrupting or disrupting the blood flow through the arteries, is a mandatory condition for maintaining the function of the lower limbs and preserving their anatomical. The imaging aspect of the obstruction degrees allows the precise establishment of the rational surgical approach and procedure.

Key words: Lower limb, arterial vascularization, arterial collateral, peripheral arterial occlusive disease.

264. SURGICAL ANATOMY OF CHEST TRAUMA

Author: **Daniela Bordea**

Scientific adviser: Suman Serghei, MD, PhD, Associate Professor, Department of Topographic Anatomy and Operative Surgery, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Pathological changes that occur following thoracic trauma include the full spectrum of mechanical damage to thoracic tissues and organs - from bruises and bruises to the soft tissues of the thoracic wall to fractures of the ribs, sternum and thoracic vertebrae, pleura, lungs, bronchi, bronchi and the heart, large vessels, diaphragm, nerve trunks, esophagus and thoracic duct. These changes in tissues and organs refer both to direct injury occurring at the place of force application and to trauma to the ribs, lung tissue and master vessels.

Aim of the study. The study of the clinical anatomy of chest trauma began to be regarded as an independent problem until the end of the 20th century, even though the interest for the surgical treatment of chest trauma is pursued throughout the history of medicine. The purpose of studying this field served the need to develop diagnostic methods, to discover different mechanisms of the pathophysiological disorders that arose from the trauma of the chest and certain vital organs, such as the heart and lungs. Also an extremely important aspect is the knowledge of the anatomical characteristics of the chest, mediastinal organs and lungs, because to a certain extent they determine the nature of the trauma, the diagnosis but also the therapeutic tactic.