МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

М А Т Е Р І А Л И

104-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького персоналу
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ
06, 08, 13 лютого 2023 року

Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2023 році №5500074

Чернівці – 2023

Komar T.V.

FETAL TOPOGRAPHY OF THE GREAT SAPHENOUS VEIN

Department of Histology, Cytology and Embryology
Bukovinian State Medical University

Introduction. The great saphenous vein is often used as material for shunting and transplantation. However, superficial vein grafts of the lower extremities are sometimes unsuitable for surgical interventions due to some anatomical variants. There are only fragmental data in the literature about the variant anatomy of the great saphenous vein in people of different age groups, despite the urgency of the need and the development of additional examination methods.

The aim of the study. The study aimed to find out the topographical and anatomical features of the great saphenous vein in human fetuses of 4-6 months.

Materials and methods. The study of the topography of the great saphenous vein was carried out on specimens of the lower limbs of 15 human fetuses of 81.0-230.0 mm parietal-coccygeal length (PCL) by the methods of thin dissection, vascular injection and morphometry.

Results. In human fetuses of 4-6 months, the great saphenous vein passes directly under the fascia of the lower leg, partly in the subcutaneous tissue, since the formation of the fascia is continuing at this stage of ontogenesis. In the lower leg, the great saphenous vein runs along the medial edge of the tibia and receives superficial veins from the anteromedial surface of the portion. In the knee area, the great saphenous vein goes behind the medial condyle of the femur and is located outside of the sartorius muscle, passing to the anteromedial surface of the thigh. After going in the canalis cruro-popliteus, the great saphenous vein turns deep through the perforated fascia, goes around the lower horn of the sickle-shaped edge of the subcutaneous solution, and flows into the femoral vein from its anteromedial side. Usually, the great saphenous vein is a continuation of the median marginal vein. In a fetus of 195.0 mm PCL, the left great subcutaneous vein is formed by three tributaries of the medial marginal vein, which, in turn, is a continuation of the posterior venous network of the foot. In the area of the lower leg, the great saphenous vein is presented by the main trunk. At the level of the transition of the tibial area into the knee area from the main trunk of the large saphenous vein at an angle of 45°, the posterior additional saphenous vein originates, which anastomoses with the small saphenous vein. In a fetus of 220.0 mm PCL, the tributaries of the lateral and medial marginal veins participated in the formation of the left anterior additional subcutaneous vein. The great saphenous vein in its initial part anastomosed with the medial marginal vein and went up above the medial bone of the tibia. An asymmetry of the topography of the subcutaneous veins of the right and left lower limbs was revealed in a fetus with a 265.0 mm PCL. The right large saphenous vein anastomoses with the right small saphenous vein at the level of the lower corner of the popliteal fossa. A posterior additional subcutaneous vein was found on the left lower limb of this fetus. At the level of the middle third of the lower leg, two anastomoses were found between the posterior additional and left small subcutaneous veins.

Conclusions. In the fetal period of human ontogenesis, the anatomical variability of the great saphenous vein was established, which is characterized by the variability of the topography, bilateral asymmetry of its inflow and the formation of venous anastomoses. The revealed variants of the fetal topography of the great saphenous vein are important for the correct interpretation of phlebographic research data and the individual choice of the most rational method of surgical intervention.

Makarchuk I.S.

PECULIARITIES OF THE SOURCES OF ORIGIN AND MORPHOGENESIS OF THE HUMAN MANDIBLE

Department of Histology, Cytology, and Embryology
Institution of Higher Education Bukovinian State Medical University

Introduction. Learning the sources, terms, chronological sequence of morphological transformations, finding critical periods and developmental peculiarities of the anatomical structure of the stomatognathic system during the prenatal period of human ontogenesis are relevant areas of

morphological studies promoting solution of an important medical-social issue – improvement of the methods of prevention, early diagnostics and effective surgical correction of congenital defects and treatment of the acquired diseases of the human mandible. Morphological description of the maxillofacial structures and peculiarities of development of the mandible in particular, does not keep pace with up-to-date requirements of practical medicine.

The aim of the study is to determine the sources and terms of origin, developmental peculiarities and dynamics of ossification of the mandible during the prenatal period of human ontogenesis.

Materials and methods. The research was carried out on the specimens of 30 embryos, 30 pre-fetuses and 60 human fetuses at the Municipal Medical Institution «Chernivtsi Morbid Anatomy Bureau» according to the agreement on collaboration.

Results. Osteogenous islets are found in embryos 10,0-11,0 mm of PCL (the middle of the 6th week of the intrauterine development). These are the areas of mesenchyme hardening located on both sides of the cartilaginous mandibular anlages. The cellular elements in their content are characterized by other forms of cells and nuclear-cytoplasmic correlation in them. The degree of intensity of the osteogenous anlages decreases in the distal direction, and they are lacking in the areas of ventral extremities of Meckel's cartilage. At the beginning of the pre-fetal period of the intrauterine development the submental nerve is detected close to the inferior border of Meckel's cartilage in the point of the primary ossification center of the mandible. Meckel's cartilages are delimited along the median line in the area of the chin by a thin mesenchyme layer. At the end of the 7th week of intrauterine development (pre-fetuses 17,0-22,0 mm of PCL) the rudiment of the mandible is found externally from Meckel's cartilages occurring from the adjacent mesenchyme. A small concavity of the cartilage is seen into the center of the primary ossification of the mandible, followed by its ossification along the whole cartilage. At the end of the 7th week of intrauterine development mandible ossification occurs not only distally from the primary center, but in the submental area as well. Due to this process Meckel's cartilage becomes surrounded by the bone along the anterior and posterior surfaces. At the same time, the process of impression of the dental lamina in the space between the cartilage and anterior bony surface of the mandible is observed. During the 8th week of the intrauterine development (pre-fetuses 21,0-30,0 mm of PCL) further ossification of the mandible occurs. It becomes visible in the area of its rami.

Conclusions. 1. During the 7th week of development (pre-fetuses 14,0-20,0 mm of PCL) the maxillary processes maximum approach the lateral and medial nasal ones; in pre-fetuses 20,0 mm of PCL they join the frontal spindle forming the facial structures (upper jaw and lip, vestibule of the oral cavity, rudiments of dental laminas, and rudiments of dental buds in its distal portions). Osteogenous islets, rudiments of the mimic and masticatory muscles, blood vessels are formed. 2. During the 8th week of development the osseous tissue of the mandible is formed, the alveolar processes are shaped. 3. The oral and nasal cavities are isolated in 9-10-week pre-fetuses (33,0-40,0 mm of PCL), the mass of the osseous tissue increases in both jaws, the enamel organs are detached, the angles and rami formed by the hyaline cartilaginous tissue of the mandible are determined, the rudiments of the temporomandibular joints are already seen. 4. During the 11th week of development the osseous base of both jaws become formed. Till the end of the 12th week the osseous tissue begins to replace the hyaline cartilage of the mandibular rami, and the articular heads are formed in the portion of their proximal ends.

Malyk Yu.Yu.

INVESTIGATION OF THE PAPILLARY MUSCLES OF THE HUMAN'S HEART LEFT VENTRICLE BY MICROSCOPIC METHOD

Department of Histology, Cytology and Embryology
Bukovynian State Medical University

Introduction. Ukraine ranks first in the prevalence of cardiovascular diseases and mortality due to them in recent years. Therefore, the increased interest in the structural and functional features of the internal relief of the ventricles of the human heart remains relevant. The normal functioning