МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

М А Т Е Р І А Л И

105-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького персоналу
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Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

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У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

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allow practicing doctors to clearly understand the features of the eriopathogenesis of malignant neoplasms of its organs and structures, to differentiate the remnants of embryonic tissues in the surgical material from tumors and to rationally apply the immunohistochemistry method in cancer diagnosis.

The aim of the study is to determine the peculiarities of the rudiments sources and the chronological sequence of topographical and anatomical transformations of the organs and structures of the human urinary system.

Materials and methods. The material for the study was 18 series of consecutive histological sections of specimens of human embryos and prefetuses (7.0-36.0 mm parietal-coccygeal length (PCL)) aged from 5 to 9 weeks of IUD. A complex set of modern methods of morphological research (anthropometry, morphometry, microscopy, 3D computer reconstruction, statistical analysis) was applied.

Results. On the specimens of embryos 7.0-7.5 mm PCL (5^{th} week of IUD), the primary renal hilus, together with changes in the shape of the metanephros to oval (5th week of IUD) and elongated (6^{th} week of IUD), changes orientation from ventral to medial. In the middle of the 6^{th} week of IUD due to the dichotomous division of the diverticulum of the mesonephric duct, the rudiment of the renal pelvis is formed, at the end of the 6th week of IUD, the number of generations is three (the rudiments of the major calices appear), and at the beginning of the 7^{th} week of IUD, the rudiments of minor calices are formed. It was determined that the transformation of the epithelium of the rudiment of the renal pelvis takes place from a simple pseudostratified columnar one with predominantly basal arrangement of nuclei in 5-week-old embryos, with a median position of nuclei in 6-week-old embryos, with an apical arrangement of nuclei – in 7-weeks to the two-layer epithelium of the renal pelvis at the beginning of the 9th week of IUD with the formation of the layers of the mucous membrane and adventitia Metanephros during the 5^{th} -9^{th} weeks of IUD move from their place of origin at the level of the sacral part of the spinal column in the cranial direction to the primordia of the adrenal glands at the level of the upper lumbar vertebrae, which is accompanied by the development of renal vessels from two sources: intraorgan (islets of angiogenesis in the metanephrogenic blastema) and extra-organ (budding of the renal vessels from the aorta and inferior vena cava) with their union at the end of the 6th week of IUD. Anatomical factors that contribute to the migration of the metanephros from the pelvis to the lumbar region are uneven, rapid syntopic changes in the retroperitoneal mass adjacent to the organ – the rudiment of the cortex of the adrenal glands, celiac ganglia and nerve branches, as well as the growth of the metanephros itself and placed above organs – the heart, lungs and liver.

Conclusions. Metanephros during the 5^{th}-9^{th} weeks of IUD move from their place of origin at the level of the sacral part of the spinal column in the cranial direction to the primordia of the adrenal glands at the level of the upper lumbar vertebrae, which is accompanied by the development of renal vessels from two sources. The end of the 8^{th} – the beginning of the 9^{th} weeks of IUD are characterized with an uneven dynamics of growth in the volume of the CPSK, recanalization of the ureteropelvic junction, cloacal membrane rupture. On the 9^{th} week of IUD, the rise of the metanephros stops due to the loss of dense connections with the adjacent organs, caused by the proliferation of mesenchyme in the adipose capsule of the kidney and fascial structures.

Buryuk O.D.

EARLY STAGES OF MORPHOGENESIS OF THE ORAL CAVITY

Department of Histology, Cytology and Embryology
Bukovinian State Medical University

Introduction. The problem of diseases of the structures of the oral cavity constantly attracts the attention of dentists and maxillofacial surgeons in connection with the persistently high frequency of pathology of both acquired and congenital genesis.

The aim of the study. Patients with inflammatory pathology of the oral cavity make up more than 60% of patients seeking dental care. For a deep understanding of the mechanism of occurrence and development of a dental pathology, first of all, it is necessary to have modern

information not only about the etiology and pathogenesis of the disease, but also about the development and formation of the organism in the norm, in particular, the structures of the oral cavity at an early period of human ontogenesis.

Materials and methods. The purpose of the study is to find out the peculiarities of the sources of the rudiments and chronological sequence of the morphogenesis of the structures of the oral cavity at an early period of human ontogenesis. 14 serial histological specimens of human embryos from 4.0 to 13,5 mm parietal-coccygeal length (PCL) were studied using a complex of morphological research methods (microscopy, three-dimensional computer reconstruction, morphometry, statistical analysis).

Results. In 4-week-old embryos, the area of the future oral cavity is marked by the oropharyngeal membrane, which is located between the cranial end of the notochord and the region of the heart rudiment. It consists of epithelia of ecto- and endodermal origin, which are tightly joined. Further degeneration of the oropharyngeal membrane at the end of the 4th week of intrauterine development (IUD) leads to the appearance of the oral opening. During the formation of the folds at the cranial end of the embryo, the oropharyngeal membrane and the cardiogenic region, located cranially from the notochord, bend ventrally and caudally, forming the floor of the foregut and the anterior body wall above the level of the umbilical cord. The process of formation of the folds of the head moves the future oral cavity to its definitive location on the front surface of the body, and also establishes permanent topographical-anatomical relationships between the heart, the cranial part of the foregut and the corresponding coelomic spaces. During this period, proliferation of mesenchyme occurs around the oropharyngeal membrane, resulting in the formation of a pit-like depression lined with ectoderm, the stomodeum or primitive oral cavity. At this stage of IUD, the oropharyngeal membrane does not come into contact with the stomodeum, but separates the lumen of the primitive oral cavity and the lumen of the foregut. Immediately after the appearance of the rudiments of the thyroid gland and pituitary gland, the avascular oropharyngeal membrane degenerates and a continuity between the lumen of the primitive oral cavity and the lumen of the foregut is formed. The first and most distinct pair of branchial arches develops from localized clusters of branchial mesenchyme around the edges of the oropharyngeal membrane. The first (mandibular) branchial arch and its derivatives will eventually form the upper and lower jaws of the definitive oral cavity, and it is the accumulation of branchial mesenchymal cells for the first branchial arch that creates the stomodeal recess of the primitive oral cavity. It should be noted that five complete branchial arches are formed in human embryos; the sixth pair is often overlooked because its caudal borders are not defined by clefts and pouches.

Conclusions. 1. In 4-week-old human embryos, the region of the future oral cavity is marked by the oropharyngeal membrane, which is located between the cranial end of the notochord and the region of the heart. 2. The process of formation of the folds of the head moves the future oral cavity to its definitive location on the front surface of the body, and also establishes permanent topographical-anatomical relationships between the heart, the cranial part of the foregut and the corresponding coelomic spaces.

Chernikova G. M.

GROWTH RATE OF THE PANTACRATIC GLAND BODY IN THE PRENATAL PERIOD OF HUMAN ONTOGENESIS

Department of Histology, Cytology and Embryology
Bukovinian State Medical University

Introduction. The first trimester of intrauterine development is decisive for the future formation and differentiation of human organs and systems not only in the intrauterine period, but also in postnatal ontogenesis. Therefore, a large number of publications on the pages of modern and foreign scientific publications are devoted to the study of human development.

The aim of the study. To find out the peculiarities of the dynamics of the morphometric parameters of the pancreas in the prenatal period of human ontogenesis.