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БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

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товщі короткого привідного м’яза переважає розсипний тип. Однак, у картині галуження нервів нами не виявлено нервових зв’язків. В одному випадку в іннервації короткого привідного м’яза брали участь передня і задня гілки ЗН. Джерелом іннервації великого привідного м’яза є ЗН і сідничий нерв. У товщу великого привідного м’яза нервові стовбурці вступають з обох сторін, переважно під гострим кутом, при цьому не спостерігається сегментарності в картині галуження передньої і задньої гілок ЗН. Передня гілка ЗН у товщі великого привідного м’яза розгалужується переважно за магістральним, а задня гілка ЗН – за розсипним типом. При цьому більш інтенсивно іннервується середня третина довгого, короткого і великого привідних м’язів. У товщі великого привідного м’яза між системами двох нервів виявлено внутрішньом’язові нервові зв’язки. Нерви вступають у черевце малого привідного м’яза, як правило, зі сторони його передньої поверхні.

Висновки. У досліджених плодів людини іннервація м’язів присередньої групи стегна забезпечується гілками ЗН. В окремих плодів до гребінного м’яза, середньої і нижньої третин черевця довгого привідного і тонкого м’язів прямували 1-2 м’язові гілки СН. В іннервації великого привідного м’яза крім ЗН, також брав участь і сідничий нерв.

СЕКЦІЯ 2
ОСНОВИ МОРФОЛОГІЇ ТА ФІЗИКО-БІОЛОГІЧНІ АСПЕКТИ СТРУКТУРНОЇ ОРГАНІЗАЦІЇ БІОЛОГІЧНИХ ТКАНИН

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PECULIARITIES OF SOURCES OF RUDIMENTS AND MORPHOGENESIS OF THE PELVICALYCEAL SYSTEM OF THE KIDNEY IN EARLY PERIOD OF THE HUMAN PRENATAL ONTOGENESIS

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Introduction. Clarifying the sources of the rudiments, features of morphogenesis and syntopic changes of organs and body structures at an early period of human ontogenesis is an important task of anatomists, histologists and embryologists. A clear understanding of the sequence of the main stages of embryogenesis and the temporal dynamics of structural transformations of the urinary system sources in the intrauterine period of human development (IUD) will 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, 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 14 series of consecutive histological sections of specimens of human embryos and prefetuses (4.0-66.0 mm parietal-coccygeal length (PCL)) aged from 4 to 11 weeks of IUD. A complex of modern methods of morphological research (anthropometry, morphometry, microscopy, 3D computer reconstruction, statistical analysis) was applied.

The results. The first signs of mesonephric duct diverticula formation are determined in human embryos of the 5th week of the IUD (embryos 7.0-7.5 mm PCL). It is represented by an ampoule-like blind expansion of the diverticulum – the primary rudiment of the renal pelvis, which is surrounded by a condensed mesenchyme, that is the formation source of the renal parenchyma – a nephrogenic blastema. Starting from the embryos of the middle of the 5th week of IUD, due to 3D computer reconstruction, the first topographical and anatomical features of the primordia of the structures of the definitive kidney are determined. The rudiments of the renal pelvises – paired ampoule-like blind expansions of the diverticulum of the mesonephric duct – are immersed in the metanephric blastema, which has the shape of a drop due to the upper narrowed end. Starting from the end of the 6th week of IUD, there is a evagination of the wall of the blind end of the

diverticulum (the rudiment of the renal pelvis) in the cranial and caudal directions, i.e., the rudiments of major calyces appears. The rudiments of the minor cups is formed by the evagination of the wall of the major calices and appears in prefetuses at the beginning of the 7th week of IUD. Age-related topographical and anatomical changes of the kidneys were also traced.

Conclusions. On the specimens of embryos 4.7-5.5 mm PCL (4th week of IUD), mesodermal sources of rudiments of structures and organs of the genitourinary system, which originate from the paired genitourinary crest, are determined. At the border of the dorsal and ventral parts of the mesoderm, in the intermediate mesoderm, the source of the urinary tubules is carried out, which form the nephrogenic cord – the only source of laying of all three generations of the kidney. At the end of the 4th week of IUD, an evagination appears on both sides from the dorsal wall of the excretory duct of the mesonephros in its caudal part, which is the rudiment of the epithelial lining of the ureter and renal pelvis. The rudiment of the renal pelvis is observed for the first time in the 5th week of IUD (embryos 7.0-7.5 mm PCL), major cups – at the end of the 6th week of VUR (embryos 12.0-13.5 mm TKD), small calices – at the beginning of the 7th week of IUD (prefetuses 14.0-15.0 mm PCL). 3. In the process of intrauterine development, the kidneys move from their original location in the pelvis, where the source of their blood supply is the common iliac artery, cranial to the primordia of the adrenal glands, giving their own vessels to the aorta, which become renal arteries.

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GROWTH RATES OF THE PANCREATIC TAIL IN THE PRENATAL PERIOD OF HUMAN ONTOGENESIS

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Introduction. Modern medicine is a system of scientific knowledge and practical activities aimed at preserving and strengthening human health, prevention and treatment of diseases. Timely detection of abnormal fetuses with the help of modern methods of prenatal diagnosis makes it possible to almost triple the population frequency of birth defects and their specific weight in the structure of prenatal mortality, child disability and serious diseases, which is of great medico-biological and socio-economic importance.

The aim of the study. Therefore, a comprehensive study of the dynamics of the morphometric indicators of the pancreas in the intrauterine period of human ontogenesis is relevant.

Material and methods. The study of the dynamics features of morphometric parameters of the pancreas in the prenatal period of human ontogenesis was conducted on the basis of embryos of 5-6 weeks in development and human forearms aged from 7 to 11 weeks (24.7-61.0 mm parietal and coccygeal length (TCL) were studied using a set of morphometric research methods (anthropometry, morphometry macroscopy, microscopy of a series of consecutive histological sections, statistical analysis). Methods of variational statistics are used to determine the average value (M) and the possible error (m), as well as the degree of reliability (p).

Results. The results of the study depicted the growth indicators of the pancreatic tail in the prenatal period of human embryogenesis (M±m): embryo length is 24.7-28.0 mm, pancreatic dimensions (mm) are the following: length - 3.00 ± 0.05 ($p < 0.05$), tail width - 0.290 ± 0.012, tail thickness - 0.260 ± 0.012; embryo length is 31.0-40.3 mm, pancreatic dimensions are (mm): length - 4.20 ± 0.22 ($p < 0.05$), tail width - 0.330 ± 0.014 ($p < 0.05$), tail thickness - 0.340 ± 0.014 ($p < 0.05$); embryo length is 42.0-48.5 mm, pancreatic dimensions are (mm): length - 5.80 ± 0.12 ($p < 0.05$), tail width - 0.450 ± 0.020 ($p < 0.05$), tail thickness - 0.490 ± 0.012 ($p < 0.05$); embryo length is 53.5 - 61.0 mm, pancreatic dimensions are (mm): length-7.40 ± 0.26 ($p < 0.01$), tail width - 0.530 ± 0.013 ($p < 0.05$), tail thickness - 0.560 ± 0.019 ($p < 0.01$).

Conclusions. Thus, it is clear from the data above that as the embryo develops, the pancreas grows and forms. During the period when the length of the fetus increases from 20.00 mm to 70.00 mm, i.e. increase by 3.5 times, the size of the pancreas increases by 5 times.