МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
ВИЩИЙ ДЕРЖАВНИЙ НАВЧАЛЬНИЙ ЗАКЛАД УКРАЇНИ
«БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

М А Т Е Р І А Л И

101 – ї
підсумкової наукової конференції
професорсько-викладацького персоналу
Вищого державного навчального закладу України
«БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»
10, 12, 17 лютого 2020 року

Чернівці – 2020

УДК 001:378.12(477.85)
ББК 72:74.58
М 34

Матеріали 101 – ї підсумкової наукової конференції професорсько-викладацького персоналу вищого державного навчального закладу України «Буковинський державний медичний університет» (м. Чернівці, 10, 12, 17 лютого 2020 р.) – Чернівці: Медуніверситет, 2020. – 488 с. іл.

ББК 72:74.58

У збірнику представлені матеріали 101 – ї підсумкової наукової конференції професорсько-викладацького персоналу вищого державного навчального закладу України «Буковинський державний медичний університет» (м.Чернівці, 10, 12, 17 лютого 2020 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

ISBN 978-966-697-843-4

The formation time of the primary ossification centers of carpal bones, metacarpals and phalanges was established. The data concerning the secondary centers of ossification and the terms of their mergering with primary ossification centers. We have described a rare case of malformation of the bones of the hand.

Navarchuk N.M.

ANATOMIC FEATURES OF THE FACIAL NERVE IN PRENATAL PERIOD OF THE HUMAN ONTOGENESIS

M.G. Turkevich Department of Human Anatomy
Higher State Educational Establishment of Ukraine
„Bukovinian State Medical University"

The embryology of the seventh cranial nerve, especially its peripheral development, has received little attention in man in comparison to the important role it plays in postnatal life.

The specimen of 21 embryos and 23 pre-fetus were selected to be the materials of the research.

Following investigational methods have been used: macroscopy, microscopy of consecutive histological sections series, conventional and thin preparations.

In a 4.2 mm embryo, the facial nerve arises in common with the eighth cranial or acoustic nerve and is attached to the metencephalon just rostral to the otic vesicle. This facioacoustic primordium (acousticofacial crest) is fibrous at its attachment, but soon becomes cellular as it courses ventrally. It passes rostral to the otic vesicle and, at the lower part of the vesicle, the acoustic division arises. The major division of the primordium (facial part) continues ventrally, becomes more cellular and compact, and appears as a column of cells. In 4.8 to 6.5 mm embryos the facial division of the facioacoustic primordium is less cellular than the acoustic division and, as it courses ventrally, it is partially surrounded by the developing acoustic ganglion. The facial division separates into two almost equal parts. The caudal part, which constitutes the main trunk of the facial nerve, shortly disappears into the surrounding mesenchyme. The rostral part enters the mandibular arch by passing ventral to the first pharyngeal pouch and will become the chorda tympani nerve, the first branch of the facial nerve to develop. The proximal part of the facioacoustic primordium begins to separate into two distinct nerves in 8.0 to 10.6 mm embryos. A complete separation appears at 14.0 mm and a discrete nervus intermedius is present at 16.5 mm, In 18.0 mm embryos the nervus intermedius is considerably smaller than the motor root of the facial nerve and is arranged as one or two main bundles that pass from the geniculate ganglion to the brainstem between the motor facial root and the acoustic nerve. In pre-fetuses 20.2 - 41.0 mm the facial nerve becomes proportionally smaller in relation to the total cranial region and its peripheral branches gradually approach the definitive condition. Proximally the facial nerve is round or oval on transverse section although peripherally, in some areas of the face, it is flat.

Nazymok Y.V.

RADIOANATOMY AND MORPHOMETRY OF THE SIGMOIDORECTAL SEGMENT IN NEWBORNS

Department of Emergency and Military Medicine
Higher State Educational Establishment of Ukraine
«Bukovinian State Medical University»

Pathology of a distal portion of the digestive tract is most often determined in the first days of a newborn life. The result of treatment depends on timely diagnostics and adequate surgical correction of a congenital defect. Each portion of the digestive system possesses its anatomical and functional peculiarities. Therefore, specification of morphometric parameters of the sigmoidorectal segment in newborns and investigation of its radioanatomy is a topical issue of present colonoproctology.

Objective: to determine morphometric parameters and skeletotopic projection of the sigmoidorectal segment of newborns.

The study was conducted on 18 dead neonatal bodies (455.0-500.0 mm of PCL) without external signs of anatomical deviations or defects by means of morphological methods of investigation: somatoscopy, anthropometry, macro- and microsection, morphometry, statistical method. To determine skeletotopy of the sigmoidorectal transition the application of radiopaque mixture was used on the base of red lead, and making metal marks on the anterior wall of the sigmoidorectal transition followed by radiography. The application and marking were made on the level of the narrowest segment within the borders of transition of the sigmoid colon into the rectum.

Topography of the sigmoidorectal segment is stipulated by the shape of the sigmoid colon and degree of its filling with meconium. The sigmoid colon of newborns is found to be mostly of a spiral shape (77.8 %), in some cases – zigzag (22.2 %). In the majority of neonates (66.7 %) the projection of the sigmoidorectal transition is found to be determined between the inferior border of I sacral vertebra and superior border of II sacral vertebra along the median surface.

In newborns the diameter of the sigmoidorectal transition is less than the diameters of the adjacent portions (Table). Morphometric parameters of the sigmoidorectal segment wall are indicative of prevailing thickness of all the membranes in the sigmoidorectal transition.

Table

Organometric parameters of the sigmoidorectal segment in newborns (n=18)

Length of the sigmoid colon (mm)	Diameter of the distal portion of the sigmoid colon (mm)	Diameter of the sigmoidorectal transition (mm)	Diameter of the peritoneal portion of the rectum (mm)
104.88±3.64 ($p \leq 0.05$)	11.52±0.4 ($p \leq 0.05$)	9.5±0.33 ($p \leq 0.05$)	13.9±0.41 ($p \leq 0.05$)

A strong correlation between the diameters of the sigmoidorectal transition, the age of the object, the length of the sigmoid colon, diameter of the distal portion of the sigmoid colon and diameter of the peritoneal portion of the rectum is found. It should be noted that the most reliable correlation is found between the diameter of the sigmoidorectal transition and the length of the sigmoid colon ($r = 0.8$; $p < 0.001$). A quick extension of the sigmoid colon length is determined compared with the second and third trimesters of the intrauterine development.

Therefore, in the majority of newborns (66.7 %) the sigmoidorectal transition projection is determined between the inferior border of the I sacral vertebral body and the superior border of II sacral vertebra along the median plane. Morphometric parameters of the sigmoidorectal segment wall are indicative of prevailing thickness of all the membranes in the sigmoidorectal transition.

Oliinyk I.Yu.

FEATURES OF THE VASCULAR BED ANLAGE IN THE GALL BLADDER AND THE CYSTIC DUCT IN HUMAN EARLY PRENATAL ONTOGENESIS

Department of Pathological Anatomy
of Higher State Educational Institution of Ukraine
«Bukovinian State Medical University»

Biliary tracts in adults have been studied in a large number of papers, but only some of them touched the features of their topography anlage throughout ontogeny prenatal period. Finding out the features of the development and anlage of the gallbladder (GB) and the cystic duct (CD) embryo topography including their sphincter apparatus will allow to substantiate morphologically and to develop new technologies for surgical correction of congenital and acquired diseases of the extrahepatic bile ducts (EBD). The aim of the study was to establish the features of morphogenesis and the structure of the gallbladder and cystic duct vascular bed in the early period of human ontogenesis. We have studied 42 specimens of human embryos and pre-fetuses with 4.5–79.0 mm of crown-rump length (4–12 weeks of intrauterine growth) on the basis of Chernivtsi regional public medical establishement "Pathological bureau". We have applied a set of morphological research methods: