

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



МАТЕРІАЛИ

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.

Загальна редакція: професор Бойчук Т.М., професор Іващук О.І.,
доцент Безрук В.В.

Наукові рецензенти:

професор Братенко М.К.

професор Булик Р.Є.

професор Гринчук Ф.В.

професор Давиденко І.С.

професор Дейнека С.Є.

професор Денисенко О.І.

професор Заморський І.І.

професор Колоскова О.К.

професор Коновчук В.М.

професор Пенішкевич Я.І.

професор Сидорчук Л.П.

професор Слободян О.М.

професор Ткачук С.С.

професор Тодоріко Л.Д.

професор Юзько О.М.

професор Годованець О.І.

ISBN 978-966-697-843-4

© Буковинський державний медичний
університет, 2020



There was the 74 specimens of the buccal region of human fetuses aged from 4 to 9 months of the intrauterine development measuring 90,0-410,0 mm of parietal-coccygeal length (PCL) (35-man's and 39 - woman's) studied using complex of morphological methods which included morphometry, anthropometry, identification of body type, preparation, 3D-reconstruction and statistic analysis.

We have developed the scheme of topographo-anatomical coordinates of boundaries of lateral and buccal regions of the face and imaginary projectional line of the parotid duct.

We have researched the relationship between parotid duct and buccal muscle on macro- and microscopic levels. We suggest that peculiarities of these structures' syntopy provides sphincteric function, which prevents regurgitation of saliva.

We have researched a variety of anatomical variants of syntopic interactions between the buccal fat pad and parotid duct and its shape variants. Duct either pierces the corpus buccal fat pad or passes it superiorly. The structures of buccal region are singled out by the considerable anatomical variability. We take it for granted to find out spatiotemporal dynamics of their syntopy and special features of their spatial structure in the future researches.

Kavun M.P.

MORPHOGENESIS OF THE LIVER IN THE LATE FETAL PERIOD OF DEVELOPMENT AND NEWBORNS OF HUMAN

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

The study of the development and formation of the liver topography in the late fetal period of human ontogenesis and in newborns is necessary both for establishing the general patterns of histogenesis of the liver, and for the learn the content of the forming processes that lead to the congenital defects of the organ

The purpose of the investigation is to establish the common patterns of the development of the liver in the late fetal period of human ontogenesis determine the content of the processes that lead to the occurrence of congenital malformations of the liver.

We have studied the characteristics of liver in late fetal period of human ontogenesis on 10 human preparations fetuses of a different age groups by the methods of histology, making image reconstruction, by the methods of usual and subtle dissections and morphometry.

The liver in the late fetal period of human ontogenesis and in newborns reaches the lateral surface of the abdominal cavity by its lateral surfaces and covers the stomach, duodenum, transverse colon and loops of the small intestine in the front.

Thus, in fetuses of 8 - 10 months of development (fetuses of 270 – 375 mm of PCL) the length of the hepato-duodenal ligament is 6 – 10 mm, the width – 9 – 12 mm.

In its upper portion between the peritoneal layers there are cystic and common hepatic ducts, proper hepatic artery and portal hepatic vein. The vein is located behind the common hepatic artery.

The common bile duct is located in the inferior portion of the ligament, to the left from it on the distance of 0,7 - 0,9 mm – the common hepatic artery with its branches is located. Backward from the above structures directly close to the common bile duct on the distance of 0,2 - 0,3 mm to the left the portal hepatic vein is located.

HDL in neonates is of a trapezoid shape, turned to the hepatic portal area by its wide base. The length is from 8,0 - 16,0 mm, the width – 12 - 18 mm.

The cystic duct is located in the upper portion of the ligament close to its right border, the common hepatic ducts – to the left. The branch of the proper hepatic artery occupies the outside left position. The portal hepatic vein is located backwards from the common hepatic duct.

It should be noted that from the beginning of the fetal period the largest formation among the tubular structures of the above ligament is the portal hepatic vein.

The development of the tubular structures of the liver that are part of the glisson triad takes place in close correlative relationships, namely, the bile ducts and branches of the own hepatic



artery develop in the majority of cases in the course of already formed branches of the portal vein of the liver.

Khmara T.V.

**STRUCTURAL ORGANIZATION OF THE THYMUS
IN 4-10-MONTH-OLD HUMAN FETUSES**

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

Morpho- and immunogenesis result from the complex interaction of precursor cells of thymocytes and their immature forms with different structural components of the stroma which allows forming a microenvironment for T-lymphocytes. The response of the immune system to the antigenic effects depends on the morphofunctional maturity of the immune-competent organs. However, information on the features of the microscopic fetal structure of the thymus has not been systematized in the sources of scientific literature and this area needs further studying.

The purpose of the study was to analyze the features of the thymus histotopography development in 4-10 month-old human fetuses.

The study involved 27 series of histological sections of thymus of human fetuses with 81.0-375.0 mm of crown-rump length.

We have studied features of the thymus structural organization in fetuses aged 4-10 months. It was established that in the early fetal period of ontogenesis the development of medullary substance is significantly ahead of cortical zone formation - the area of the medullary substance in the thymus is much greater, you can observe numerous epithelioreticular stromal cells in it. At the end of the 5th month of fetal growth, an intensive development of connective tissue stroma, germinating between the thymus particles, occurs; an intensive formation of the cortical substance in the thymus particles can be observed; vascularization, which creates conditions for the formation of the blood-thymic barrier, further differentiation of stromal cells and practically complete development of lymphocyte programmed differentiation, improves.

From the middle of the 7th month of intrauterine development (fetuses with 250.0-260.0 mm of crown-rump length) there is an increase in the area of the peripheral part of the thymus lobe- the cortical substance. The thymus lobes are well-formed, limited by stromal connective tissue with blood vessels. In the thymus there are large-sized particles with a large area of cerebrospinal fluid, with the connective tissue layers and with small vessels in their cortical substance. In the medullary substance of the thymus there are Hassall's corpuscles among which there are single large thymic corpuscles. When the Hassall's corpuscles are magnified enough you can clearly distinguish cells (nuclei and cytoplasm), some layers of cells (layered corpuscles). In the 8th month of intrauterine development (fetuses with 271.0-310.0 mm of crown-rump length), the structural organization of the thymus is similar to the previous term. In the fetuses with 320.0-330.0 mm of crown-rump length, the cortical substance of the thymus lobes is infiltrated by T-lymphocytes, which densely fill the lumens of the reticulate epithelial shell resulting in this part of the lobe having a characteristic appearance and dark color on the specimens. The brain substance of the thymus lobe has a lighter color, because it contains less lymphocytes compared with the cortical substance. In the brain substance of the thymus are the bodies of Hassall. The medullary substance of the thymus is lighter in color as it contains fewer lymphocytes than the cortical substance. The medullary substance of the thymus contains Hassall's corpuscles. At the end of the fetal period of human ontogenesis, an increase in the area of the cortical substance of the thymus lobes is observed. In the thymus there are large-sized particles with a large area of medullary substance with layers of the connective tissue with small vessels in their cortical substance. The medullary substance of the thymus contains a moderate number of Hassall's corpuscles.

In the fetuses with 320.0-330.0 mm of crown-rump length in the thymus lobes the cortical and medullary substances are clearly differentiated. Cortical substance of the thymus lobes is infiltrated by T-lymphocytes, which densely fill the lumens of the reticulate epithelial shell.