



structure and defects in its growth during the postnatal period of ontogenesis, they can also be used while elaborating new operative approaches and maneuvers for newborns. Anatomy of major neck veins has been sufficiently described in adults, but few publications have been devoted to morphogenesis of the jugular veins and jugular angles in human prenatal period, and the available data are controversial and fragmented.

Objective. To determine topographical and anatomical features of the internal jugular veins during the third trimester of the intrauterine growth.

The study was conducted on 32 cadavers-specimens of the fetuses aged 4-10 months and 163,0 to 500,0 mm long from the vertex to the heel, by means of macro and micropreparation, radiography, vascular injections and morphometry.

The internal jugular veins extend vertically downwards from the external base of the skull to the place of joining with the subclavian veins. The superior and inferior bulbs in the internal jugular veins of the fetuses aged 4-10 months can be identified, their external diameter being different at different levels; it is only the same in the fetuses, aged 6-7 months, except the inferior sections (veins dilate). The external diameter of the right internal jugular vein in 4-months-old fetuses is $1,8 \pm 0,3$ mm, in 6-months-old - $2,7 \pm 0,2$ mm, 7-months-old - $3,4 \pm 0,1$ mm, in 10 - months-old, $4,5 \pm 0,2$ mm, the external diameter of the left internal jugular vein increases from $1,5 \pm 0,3$ mm (4-months-old fetus) to $2,4 \pm 0,2$ mm (6-months-old fetus) and from $1 \pm 0,2$ mm (7-months-old fetus) to $4,2 \pm 0,2$ mm (10-month-old fetus). In the upper part the internal jugular veins take retromandibular, pharyngeal, facial, lingual veins and rarely (4 cases out of 32), jugular venous arch. The internal jugular veins are located under the sternocleidomastoid and scapular-hyoid muscles. The muscles of subhyoid group are adjacent to the medial surface of the internal jugular vein, the right common carotid artery to the posteromedial surface, the right vagus adjoins the posterior surface, the medial edge of the anterior scalene and the right phrenic nerve are adjacent to the lateral surface. The internal jugular veins along with the subclavian ones in the lower sections of the neck form jugular venous angles. The right jugular angle rate in 4-10 months old fetuses is $105-120^\circ$ that of the left angle is $120-140^\circ$, the lowest angle rates were found in the fetuses, aged 5 months. During the perinatal period of the ontogenesis some more complicated topographic and anatomic correlations with the internal jugular veins and the adjacent structures of the neck take place.

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THE DEVELOPMENT OF THE LIVER IN THE PREFETAL PERIOD OF HUMAN ONTOGENESIS

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The characteristics of the liver were studied before fetal period of human ontogenesis. 20 human cadaver prefetuses of different age groups were studied by means of histological methods with image reconstruction and morphometry.

At the beginning of the prefetal period (prefetuses 14.0 - 20.0 mm of crown-rump length (CRL)) the liver was found to increase significantly in its size. Its transverse size is already 5.0 mm.

The right and left sagittal fissures are clearly defined on the visceral surface of the liver in the 7th week prefetuses. The gallbladder is in the right anterior sagittal sulcus; umbilical vein is in the right anterior sagittal sulcus.

The development of the liver during the 8th week of prenatal development was studied on 10 series of histological sections of human prefetuses with the size from 21.0 mm to 30.0 mm CRL.

The liver continues to enlarge in its size, and its transverse dimension in the correspondent group of the prefetuses is 6.0 mm.

In this age group of prefetuses the hepatic-duodenal ligament runs from the liver gate to the top of the duodenum and reaches the head of the pancreas. In the thickness of the ligament the hepatic artery and bile ducts are located. The portal vein of the liver passes to the left from the bile duct. Then it turns slightly behind the hepatic artery.

Morphogenesis of the liver in the middle of the prefetal period (9th week of fetal development), was studied on six histologic series of the human prefetuses with the size from 31.0 to 41.0 mm CRL.

The liver occupies upper and middle floors of the abdominal cavity in prefetuses of this group, the cross body size of the liver is 3.5 mm, longitudinal body size - 7.0 mm. The hepatic artery proper is presented to the left of the common bile duct in the gate of the liver. The portal vein of the liver passes behind and slightly below the artery.

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PECULARITIES OF METASTASES IN WOMEN OF CHERNIVTSI REGION WITH INVASIVE DUCTAL BREAST CARCINOMA ACCORDING TO TNM CLASSIFICATION (CATEGORY T-N)

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In the case of invasive ductal breast carcinoma, the severity of the disease and the life prognosis is determined by the histological type of the tumour and/or occurrence of metastases. Metastases are secondary tumour changes that occur due to invasive growth and dissemination of the tumour in the patient's body. It is rather complicated cascade of processes of tumour cell separation, its penetration through the biological barriers, implantation into new tissues and the initiation of growth of a separate malignant process. In metastasis of carcinoma are found life prognosis and survival of patients worsens immediately. According to number of studies breast carcinoma occupies a leading place in the



structure of malignant cancer among women, focuses on topical issues nowadays. Histopathologic, histochemical and immunohistochemical features of the tumor are successfully used for prognosticate occurrence of metastases.

The objective of the study was to investigate the peculiarities of metastases occurrence in women with invasive ductal breast carcinoma gland in Chernivtsi region. The distribution of cases of invasive breast carcinoma by its categories (T and N) to detect the presence or absence of metastasis in them was conducted.

Among all the cases of carcinoma those without metastasis were 40.1%, with metastasis - 59.9%. Under N category (metastasis to regional lymph nodes: N1-29%, N2 - 11.1%, N3 - 19,8%). In the group of T category in most cases T2 - 30,2% of all observations, with metastases - 57.8%, without metastases - 42.2%.

As a result of the studies it was found out that about 60% of invasive ductal carcinoma was accompanied by metastasis, among the T categories the largest is T2, that was indicative of a high risk of metastasis and was characterized by a negative of life prognosis. And in N category the majority of were found in N1, the least in N2.

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MORPHOGENESIS AND STRUCTURAL CHANGES OF THE GREAT DUODENAL PAPILLAE IN THE EARLY PERIOD OF HUMAN ONTOGENESIS

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The research was conducted using microscopy of series of histological sections of human prefetuses and plastic and graphic reconstructions. In the early prefetal period (prefetuses 15,0-40,0 mm CRL) the bile duct is found to be transformed into the intramural one which, when combined with the pancreatic duct forms hepatic ampulla. The latter is surrounded by a circular layer of mesenchymal cells, separated from the circular layer cell membranes of the intestinal wall, indicating the formation of sphincter muscle of the hepatic-pancreatic ampulla. According to our results the germ of the sphincter muscle of the ampulla appears in prefetuses 19,0-21,0 mm CRL.

At the beginning of the 8th week (prefetuses 21,0-24,0 mm CRL) due to the reduction of epithelial plug connection with the bile duct lumen of the duodenum is formed. Along with this the major duodenal papilla is formed, which looks like protrusion of the medial epithelial membrane of the bowel wall at the hepatic-pancreatic ampulla. The emergence of the greater duodenal papilla coincides in time with the formation of intestinal villi and the beginning of the secretion of bile into the lumen of the duodenum, which determines readiness for fetal amniotrophic supply.

During the 9th week myoblasts are seen among mesenchymal cells of the wall of the bile duct, which is indicative of the formation of muscle membranes. Thus, the myoblasts appearance is asynchronous in different parts of the bile duct. Mainly they are concentrated in the caudal part of the bile duct deep in the sphincter.

At the 10th week the pancreatic part of the bile duct is placed in the furrow between the head of the pancreas and the medial wall of the descending duodenum and forms a bend to the right and forward. Intramural part of the bile duct is placed vertically in the thickness of the medial wall of the descending duodenum on the verge of middle and lower thirds. In the wall of the bile duct smooth myocytes, which form separate longitudinal muscle bundles, are seen and around the intramural parts of bile duct, the pancreatic duct and hepatic-pancreatic ampulla demonstrate a continuous circular muscle layer that forms the basis of Oddi's sphincter.

By the end of prefetal period (prefetuses 70-79 mm CRL - 11-12 weeks) the bile duct reaches 2.8 mm, and topographic anatomical relationship with adjacent structures resembles definitive ones.

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THE STRUCTURE CHANGES OF THE FETUSES BUCCAL REGION SOFT TISSUES MORPHOLOGY IN THE DEVELOPMENTAL DYNAMICS

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Within the buccal region (BR) there are many anatomical structures, including the terminal part of the parotid duct, Bichat fat pad, blood and lymph vessels, nerves. The layered structure of BR soft tissues includes a skin, a subcutaneous fat cellular tissue, a face superficial fascia, a buccal fat pad, mimic muscles, a face deep fascia (parotid fascia), buccal mucosa. This region also contains a significant amount of fat, which is called buccal cellular space in the scientific literature.

To understand the causes and mechanisms of the facial congenital and acquired diseases, the current data on the ontogeny, spatial and temporal changes in the microscopic structure of the BR soft tissue are very important. An urgent task of the morphological science in this region is a comprehensive study of the BR structures topography development and formation in prenatal ontogenesis, including using new research methods, such as laser polarimetry. These methods in embryological studies are at the stage of establishing and testing of biological tissues thin sections optical and morphological properties.

In order to determine the objective criteria for normal morphogenesis of the cheeks structures in human fetuses in the dynamics of fetal development, the studies has been conducted on 25 fetuses specimens aged 5 to 10 months of fetal development (220,0-480,0 mm crownrump length) using traditional morphological (preparation, morphometry, micro- and macroscopy) and methods of biological tissues thin sections polarization microscopy (Stokes-polarimetry,