



The study was performed on 30 dead 4-6-month fetuses (161,0-290,0 mm of PCL) on the basis of Chernivtsi Regional Pathological-Anatomical Bureau (during planned sections) by means of the methods of macro- and micropreparation, morphometry, documentary photographing and injections of the arterial vessels. The projection of the sigmoid-rectal segment was found to be affected by the shape of the sigmoid colon. In case of U-shaped sigmoid colon its proximal portion was found to be detected in the left inguinal area, and the distal one – in the medial plane of the pubic area. At the beginning of the second trimester evaginations of the U-shaped sigmoid colon are not developed, and semilunar folds are absent. Mesenteric-colon and omental strips are not found macroscopically. A free strip passes along the anterior surface of the sigmoid colon. Adipose appendages are absent. To the end of the second trimester the U-shaped sigmoid colon looks like a “goffered tube” with clearly seen adipose appendages located along the free strip.

The components of the sigmoid-rectal segment are found closer to the median plane. The anterior surface of the sigmoid-rectal segment adjoins the urinary bladder, loops of the small intestine, touches the anterior abdominal wall. The right ureter is located backward from the sigmoid-rectal segment, and the right ovarian artery and vein are located laterally. The right ovary directly adjoins the sigmoid-rectal passage. At the beginning of the second trimester the sigmoid-rectal segment is a cylinder bent a little in the frontal plane and without clear borders it continues into the rectum. To the end of the 6th month in the place of the sigmoid-rectal passage the lumen located directly above the peritoneal portion of the rectum becomes narrower. Mesenteric-colon, omental and free muscular strips of the sigmoid colon form a continuous muscular layer on the level of the sigmoid-rectal passage. Adipose appendages are found along the free strip.

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ASPECTS OF HUMAN LARYNX FORMATION IN THE DEVELOPMENT OF FETUS

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The aim of the study was to comprehensively examine the chronological patterns of morphogenesis of larynx and its syntopic relationships with neighboring structures within 3-5 months of human fetal development with the following timing of the possible occurrence of congenital defects. The study was conducted on cadavers fetuses 3-5 months of age with the aid of anthropometry, macro-microscopy of series of consecutive histological and topographic anatomical sections, standard and thin preparation, radiography, reconstruction and stereo photography.

During the 3-5 months of fetal development larynx is located anteriorly to the level of bodies of II-III cervical vertebrae. Topical superiorly it is connected tightly to the hyoid bone inferiorly it is continues with the trachea, posteriorly adjacent to the laryngeal part of the pharynx, which forms a single morphological complex.

Its height varies from 4.8 to 8.6 mm, width - from 4.7 to 6.2 mm, ventrodorsal size - from 5.5 to 6.5 mm. Next to the larynx we observed not yet sufficiently developed infrahyoid neck muscles (sterno-hyoid, sterno-thyroid, thyro-hyoid), their fascia and skin. Externally lies a small laryngeal prominence, which is formed by plates of the thyroid cartilage. On each side of the larynx the right and left vascular nerve bundles of the neck are seen as well as lobes of thyroid gland.

The wall of the larynx, as a future voice-box is formed by three membranes: internal - mucous, middle - fibrous, cartilaginous and external - connective tissue. Epithelial mucosa and lamina propria are clearly seen. Mucous membrane is preferably lined with pseudomultilayer columnar epithelium with a great amount of goblet cells. The region of vocal cords and epiglottis are covered with stratified squamous epithelium. Lamina propria and submucosa are seen as loose connective tissue, with a certain amount of elastic fibers. In submucosa we have observed solitary, mainly located on the anterior wall of the larynx, secretory parts of mucous glands.

Blood supply is provided by two arteries: upper laryngeal artery that is a branch of the upper thyroid artery and lower laryngeal artery that goes from the lower thyroid artery. In the wall of the larynx they are divided into the first and the second order's branch. Innervation is carried by fibers of the upper and lower laryngeal nerves, that are branches of the vagus nerve.

Thus, during the period of fetal development the formation and building processes of larynx continue. The formation of cartilages is almost complete, but muscles are still not developed. Vocal cords are distinct. However, the formation of the topography of the larynx continues after birth. Upper laryngeal nerve fibers innervate ring-thyroid muscle and mucous membrane of the larynx above the glottis. Lower laryngeal nerve fibers enter other muscles of the larynx and mucosa below the glottis.

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THE INTERDEPENDENCE OF STRUCTURAL ORGANIZATION OF OSSEOUS BASE OF THE SKULL AND MORPHOMETRIC PARAMETERS OF THE VISCEROCRANIUM

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The role of the bone structures in the manifestation of facial asymmetry is practically unstudied. The data on the current asymmetry of the face, obtained as the results of the study, are of a high importance for cosmetologists, maxillofacial surgeons, forensic experts, anthropologists, and can be used for person's identification, elaboration of surgical accesses in the plastic face surgery and restoring bone fragments.



In order to determine the shape of the skull and its facial profile, the skulls of 35 adult cadavers aged from 22 to 60 years, without signs of mechanical damage and anomalies of the skeletal system were used as a research material. To study the asymmetry of the viscerocranium and the degree of its severity a "fan-shaped method" of morphometry was used [I. Haivoronsky, E. Dubovik, 2009]. The width-height parameters of viscerocranium were studied by the craniometry method, with the help of thickness caliper with millimeter scale graduations and technical trammels. To determine the spatial coordinates with by stereotopometry method, the craniostereobasiometer was used, the coordinates of craniometric points accurate within 0.05 mm according to their projection on the sagittal, frontal and Frankfurt planes were determined. The identification of patterns of relative shapes of the skull and facial profile in its basilar craniotypes was based on the conducted studies.

Thus, the mesoprosopic shape of the facial skull in half of the cases was observed in platibasylar (50.0%), - in medio- (44.5%) and flexibasylar craniotypes (40.0%). Leptoprosopic shape of facial skull was seen in 1/3 cases - in mediobasylar craniotype (33.2%), more often - in flexibasylar (40.0%) and the least - in platibasylar (23.0%).

The orthognathic facial profile shape was often seen in flexibasylar craniotypes (84.0%) and in 2/3 cases of mediobasylar (77.0%) and the least - in platibasylar (68.6%). Mesognathic shape of facial profile in 1/3 cases was defined in platibasylar craniotype (18.4%), and the least - in mediobasylar (11.1%) and in rare cases – flexibasylar craniotype (44.0%).

Prognathic shape of facial profile was observed in flexibasylar craniotype (10.0%) and in some cases - in medio-and platibasylar (less than 3.8%).

The study led to the conclusion that the correlation of the sizes of the facial skull such as distances from the point nasion to the point at the lateral edges of the piriform opening, the distance from the point nasion and the lowest point of the piriform opening allow to create mathematical models of the most important dimensions of facial skull.

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ECTOPIC PREGNANCY NOWADAYS: PATHOMORPHOLOGICAL RESEARCH

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In ectopic pregnancy the embryonic implantation occurs outside the uterus most commonly in the fallopian tube. Ectopic pregnancy is a medical emergency, if not treated in time can lead to fatal consequences. In normal pregnancy, the fertilized ovum enters the uterus through fallopian tube in uterine cavity and settles into the uterine mucosa where it has plenty of space for its growth and development. About 1% of all pregnancies are found to be in an ectopic location with implantation not occurring inside of the uterus. Of these ectopic pregnancies 98% occur in the fallopian tube. The incidence of ectopic pregnancy has markedly increased in the last decade.

The study was conducted on 20 patients aged between 28 to 40 and having ectopic pregnancy of 2-3 months of gestation. In addition to its presence, the location of corpus luteum was also considered. The excised part of the tissue was taken and fixed in 10% formalin solution and processed for light microscopy.

Ectopic pregnancy was found on the left side in 9 cases and on the right side in 11, but the corpus luteum was found in all cases by inspection. The lumen was found to be tortuous in eleven cases as compared to tubal lumen in the control tube removed in other benign surgical cases. All the tubes showed evidence of trophoblastic proliferation invading maternal tissues resulting in extravasation of a significant amount of maternal blood. The orientation of implantation with reference to the major blood vessel appeared to be random. On microscopic examination of the slides the predominant pattern of spread of trophoblast and hemorrhage could be classified as predominantly intraluminal, predominantly extraluminal or combined. The maternal blood vessels were invaded by trophoblast soon after initial implantation. In the majority of cases the tube was not ruptured and the blood often leaked out of abdomina ostium of the fallopian tube after filling the lumen.

The present study provided opportunity to extend some valuable information regarding tubal pregnancy, its mode of occurrence and mechanism of invasion and infiltration of the tubal wall. The mechanism of implantation is considered to be the following: the ovum is picked up by the fimbriated end of fallopian tube which is held in close contact with ovary by the fimbria ovarica which sweeps across the surface of the ovary during ovulation.

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MORPHOLOGY OF THE THIRD VENTRICLE DURING 16-20TH WEEKS OF PRENATAL PERIOD OF HUMAN ONTOGENESIS

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The aim of our study was to examine the peculiarity of the formation of the third ventricle in different ontogenetic periods. Studies of the morphology of the walls of the third ventricle were conducted on 15 human cadavers by methods of histology, dissection and morphometry.

Most of the structures of the third ventricle are present at the 13th week of fetal development. The form of cavity is diamond. Its length is $6,2 \pm 0,58$ mm, width - $2,45 \pm 0,25$ mm. The roof consists of the medullar and mesenchymal layers. The depth of the epithelial plate is $8,0 \pm 1,68$ mm. The mesenchymal layer of roof is thinner. It is