



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.