

noted. Villous vessels were mostly narrowed, with reduced capillary density (hypovascularization). The cytotrophoblast showed moderate hyperplasia, while the syncytiotrophoblast exhibited focal cytoplasmic vacuolization and small areas of desquamation. The intervillous space contained a moderate number of maternal cells (mainly lymphocytes and macrophages) and occasional fibrin deposits.

In placentas with chronic basal deciduitis combined with iron deficiency anemia, villi were predominantly small-caliber, showing marked distal hypoplasia. The basal plate was thickened, with pronounced lymphoplasmacytic infiltration, focal vascular sclerosis and hyalinosis, leading to significant impairment of uteroplacental blood flow. The villous stroma was compacted and partially fibrotic, with isolated fibrinoid deposits. The number of villous vessels was decreased (hypovascularization), with luminal narrowing or collapse. Some villi exhibited ischemic-dystrophic changes such as stromal shrinkage, trophoblast cytoplasmic vacuolization, and syncytial nuclear pyknosis. The cytotrophoblast displayed degenerative changes, while the syncytiotrophoblast appeared thinned, with focal discontinuities of the covering layer. The intervillous space showed a reduced number of maternal erythrocytes, focal fibrin deposits, and occasional macrophages.

**Conclusions.** In chronic basal deciduitis, inflammatory involvement of the basal plate and impaired uteroplacental circulation were revealed, manifested by distal villous hypoplasia and moderate trophoblastic degeneration. The combination of chronic basal deciduitis with iron deficiency anemia was associated with more pronounced ischemic-hypoxic changes in the villi, hypovascularization, stromal fibrosis, and trophoblastic degeneration. The obtained morphological data indicate a synergistic effect of inflammatory and hypoxic processes in the placenta, forming the structural basis for the development of placental insufficiency.

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## **ANATOMICAL FEATURES OF THE THIGH PARAMETERS OF BUKOVYNA STUDENTS**

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**Introduction.** It is known that the factor that determines success in sports is the morphological features of the structure of the human body.

**The aim of the study** is to establish the anatomical characteristics of thigh parameters of students of Bukovyna who play football and handball, followed by modeling for sports selection.

**Material and methods.** Students of higher educational institutions of Bukovyna (n=129), of which young boys - n=69 and young girls - n=60. The subjects were divided into a main group - 89 students who improved by playing football and handball and a control group - 40 students who did not do the sports. Students of the main group, in addition to the physical activity that was included in the program of their specialty during the year, attended sports sections in football and handball during the year. Medium-intensity training took place under the control of a trainer, the frequency of training was  $3.43 \pm 1.26$  days/week (90 minutes each). Students of the control group did not do the sports. The initial survey was conducted in 2021 year, and the same students were resurveyed in 2022 year. All subjects were subjected to an anthropometric study, according to the method of P.P. Shaparenka (thigh circumference in the upper third, in the middle third and in the lower third, body weight, height).

**Results.** It was found that when comparing the first and second measurement, the thigh circumference indicators at the second measurement (in dynamics after one year) were slightly higher in students who played football (young boys and young girls) in the upper, middle and lower thirds than in students who played handball (for students who played football  $\pm 3.43$  cm, for students who played handball  $\pm 2.12$  cm). The model for predicting the circumference of the thigh in the upper third on the right:  $C_{pr} = \beta_1 + \beta_2 + 0.493w - 0.135h$ , where  $C_{pr}$  is the circumference of the thigh in the upper third (right),  $w$  is body weight,  $h$  is height,  $\beta_1 = (49.735$  for girls and  $44.489$  for young men),  $\beta_2 = (-1.391$  for the soccer group;  $-2.321$  for the handball group), on the left:  $C_{pl} = \beta_1$

+  $\beta_2 + 0.465w$ , where  $C_{pl}$  is the circumference of the thigh in the upper third (left),  $w$  is body weight,  $\beta_1 = (25.736$  for girls and  $20.147$  for boys),  $\beta_2 = (-1.333$  for the football group;  $-0.515$  for the handball group).

The model for predicting the circumference of the thigh in the middle of the right:  $C_{mr} = \beta_1 + \beta_2 + 0.460w - 0.183h$ , where  $C_{mr}$  is the circumference of the thigh in the middle of the right,  $w$  is body weight,  $H$  is height;  $\beta_1 = (52.567$  for young girls and  $48.930$  for young boys),  $\beta_2 = (-2.235$  for the football group;  $-1.968$  for the handball group); on the left:  $C_{ml} = \beta_1 + \beta_2 + 0.449w$ , where  $C_{ml}$  is the thigh circumference in the middle of the left,  $w$  is body weight;  $\beta_1 = (20.716$  for young girls and  $20.943$  for young boys),  $\beta_2 = (-0.254$  for the football group;  $-1.405$  for the handball group). The model for predicting the circumference of the thigh in the lower third of the right:  $C_{dr} = \beta_1 + \beta_2 + 0.418w$ , where  $C_{dr}$  is the circumference of the thigh in the lower third of the right,  $w$  is body weight,  $\beta_1 = (25.560$  for young girls and  $20.165$  for young boys),  $\beta_2 = (-0.039$  for the football group;  $0.061$  for the handball group); on the left:  $C_{dl} = \beta_1 + \beta_2 + 0.387w$ , where  $C_{dl}$  is the thigh circumference in the lower third on the left,  $w$  is body weight;  $\beta_1 = (24.638$  for young girls and  $18.523$  for young boys),  $\beta_2 = (-0.379$  for the football group;  $-0.261$  for the handball group).

**Conclusions.** So, it is established that for significant predictors for predicting thigh circumference on the right in the upper and middle third are gender, sport, height and body weight, in the lower third are gender, sport and body weight, on the left are gender, sport and body weight.

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## **MORPHOLOGICAL CHARACTERISTICS OF THE PAROTID GLAND**

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**Introduction.** Formation of the organs is a very complicated process which is not definitively studied nowadays. It is very important to study the structure of the organs and systems in association with the basic processes of morphogenesis on the basis of the findings of embryogenesis. The study of the development and forming of the topography of the parotid gland during the prenatal period human ontogenesis is of great importance for integral understanding of the structural and functional organization of the salivary apparatus and the oral cavity on the whole. The analysis of scientific literature dealing with the parotid gland anatomy is indicative of a fragmentariness and discrepancy of the data, pertaining to the syntopy and chronology of the topographic and anatomical changes during the fetal period of human ontogenesis.

**The aim of the study.** The objective of the study was to investigate variant anatomy as well as topographic and anatomical peculiarities of the human parotid gland and surrounding structures in fetuses.

**Material and methods.** The parotid gland was examined in 25 human fetuses, 130,0-375,0 mm of the parietal and coccygeal length (PCL). Methods applied in the course of the study were thing section of the parotid gland and parotid-masticatory area under the control of a binocular magnifying glass; macro- and microscopy; morphometry; computed 3-D design.

**Results.** The parotid gland is found to be located in fetuses with 130,0-375,0 mm of PCL in a deep depression posteriorly the branch of the lower jaw, in the posterior mandibular fossa. A greater part of the gland is located between the mandible and sternocleidomastoid muscle penetrating deeply between these structures. The skin of this particular region is thin, movable. The subcutaneous pot is thin and fused with the skin. The structure of the parotid gland of 4-10month human fetuses is anatomically changeable which is manifested by different shape (oval, leaf-shaped, horseshoe-like, triangle, irregular tetragonal), location and syntopy. Computed 3-D design of the gland presents its volumetric description which is the most practical one – in the shape of trilateral pyramid turned to the malar arch by its base, and to the mandibular angle – by its apex. A number of structures pass through the tissue of the parotid gland including facial nerve, posterior mandibular vein, external carotid artery, auricular-temporal nerve. The parotid duct is formed due to the fusion of two extra-organ lobular branches which in their turn are formed by means of fusion of several upper and lower lobular ducts emerging from the gland tissue passing through its capsule.