



the placenta chorionic villi was calculated. Differences in mean values were made using the bilateral odd Student's t-test criterion. The results of the study are presented in the table.

Table

Research groups	Ki-67-positive nuclei in the chorionic villi trophoblast (%)
Physiological pregnancy	3±0,9
Iron deficiency anemia of pregnant women (n = 21)	48±2,9 (P<0,001)
Basal deciduitis chronic (n = 20)	55 ± 2,8
Basal deciduitis chronic + IDAP (n = 21)	57 ± 3,7 (p <0,05)

Therefore, iron deficiency anemia of pregnant women without inflammation increases the number of Ki-67 positive trophoblast cells of the placenta chorionic villi. In case of chronic basal deciduitis, proliferative activity increases, but iron deficiency anemia does not cause intensification of these processes.

**Karatieieva S.Yu.**

### **MORPHOPATHOGENESIS IN THE DESTRUCTIVE PROCESS OF DIABETIC FOOT**

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The urgency of this problem is due to the fact that more than 30-70% of patients with diabetes have purulent-inflammatory processes and 50% of hospitalized patients need surgical treatment because have purulent and necrotic lesions.

The current study was conducted on diabetic patients who often have purulent inflammatory processes (n = 40) by means of the clinical indicators of the wound process, microscopic examination.

The study results shown the following information, the purulent inflammatory processes of soft tissues, under conditions of hyperglycemia, have certain peculiarities and occur in 40% of patients with this pathology. Violation of cellular and humoral parts of the immune system leads to the rapid spread of pathogenic microorganisms, local manifestations of inflammation are not always accompanied by systemic signs of infection, which leads to late treatment of patients. The monocytes-macrophages play an important role in the development of wound purulent processes of soft tissues. The disorders of endocrine-metabolic processes, which consistently occur, end in tissue necrosis and the need to perform in this category of patients surgical interventions aimed at removing non-viable tissues.

The most life-threatening complication of diabetes is vascular damage. At the same time 80-100% of patients develop diabetic angiopathy of the vessels of the lower extremities. Complications of diabetes are observed in 82.7% of patients. The prevalence of both micro- and macroangiopathies increases with the age of patients and the duration of diabetes, increasing mortality from vascular complications. Activated changes in the vascular system with lesions of the micro- and macrocirculatory areas and the resulting microthrombosis contribute to tissue hypoxia, which leads to rapid spread of the process through the tendon sheaths and cell spaces of the foot with subsequent development of gangrene of the lower extremity lead to amputation.

So, the vascular system has activated changes of lesions of the micro- and macrocirculatory areas and the resulting microthrombosis contribute to tissue hypoxia, which leads to rapid spread of the process through the tendon sheaths and cell spaces of the foot with subsequent development of gangrene of the lower extremity, lead to amputation.

**Kashperuk-Karpiuk I.S.**

### **THE ANATOMICAL FEATURES OF THE BUCCAL REGION**

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Buccal region is a complex of structures of soft tissues, anatomic components of which are in a close mutual position, while its shape is maintained of the external muscular-aponeurotic



system. It consists of muscles, fascias and maintaining junctions, which come from deep and fixed structures to the moved skin.

There are numerous anatomic structures located on relatively small area, including terminal segment (portion) of parotid duct, buccal fat pad, blood vessels, lymphatics and nerves. The lack of knowledge about the structural peculiarities of buccal region ensure new researches, which in turn allows to improve the methods of diagnostics and surgical correction of congenital and acquired diseases of human face.

We have developed the scheme of topographical and anatomical coordinates of the boundaries of lateral and buccal areas of the face and imaginary line of the parotid duct. Parotid duct projection on the skin of buccal region passes from the auricle's tragus to the angle of the mouth.

The direction of the parotid duct is arched, with the convexity up, due to well developed buccal fat pad. The additional parotid duct is detected in 22% of cases. A variety of anatomical variants of syntopic interactions between the buccal fat pad and parotid duct or its shape variants have been researched. Duct either pierces the corpus buccal fat pad or passes it superiorly.

There were 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-men's and 39 - women's) studied using complex of morphological methods which included morphometry, anthropometry, identification of body type, preparation, 3D-reconstruction and statistic analysis.

The scheme was developed for topographical and anatomical coordinates of boundaries of lateral and buccal regions of the face and imaginary projectional line of the parotid duct.

The relationship between parotid duct and buccal muscle has been researched on macro- and microscopic levels. The study suggests that the structural peculiarities of the syntopy provide sphincteric function, which prevents regurgitation of saliva.

So, a variety of anatomical variants of syntopic interactions between the buccal fat pad and parotid duct and its shape variants have been researched. 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. The further aim of this study is to find out spatiotemporal dynamics of their syntopy and special features of their spatial structure.

**Kavun M.P.**

### **MORPHOGENESIS OF LIVER VESSELS IN HUMAN EMBRYOS**

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The study of the development and formation of the of liver vessels in human embryos 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 study was to establish the general development patterns of liver vessels in the embryonic period of human ontogenesis and to determine the composition of the processes leading to the occurrence of congenital liver malformations.

The primary liver anlage was found in embryos 4.0 - 5.0 mm in length, which corresponds to the beginning of 4 weeks of intrauterine development. It is presented in the form of a conglomerate of epithelial cords that grow into a transverse septum that surrounds the intestinal tube and hepatic bay on three sides.

The blood supply to the liver at this stage of embryo development occurs due to two bringing venous systems: umbilical veins and yolk-mesenteric veins that go from the yolk sac to the body of the embryo.

While developing, the yolk-mesenteric veins form venous sinusoids, with which the development of the liver is closely related. Liver cells, which grow into the transverse septum, surround the sinusoids on all sides, in close contact with them. Between the liver cells there is a