



Objective of the work was to improve morphological diagnostics of preterm maturation of the placental choroid tree with IDAG during 33-36 weeks of gestation. Material and methods: 63 placentas were examined. The following groups of the study were formed: the main group №1 – the examination of combined IDAG and preterm maturing of the choroid tree in 33-36 weeks of gestation, (n=20). The comparison group №2 – the examination of preterm maturing of the choroid tree without any anemia in labour in 33-36 weeks of gestation, (n=22). The group №3 - physiological pregnancy (37 - 40 weeks of gestation), (n=21).

The placental tissue was preserved in phosphate buffered neutral 10% formalin solution with further passing the material and preparing paraffin blocks. By means of a sliding microtome the cuts were made 5 micrometers thick keeping to appropriate requirements. Histological examinations were conducted on the base of histological samples stained with hematoxylin and eosin. In every placenta in random fields of vision for 400 choroid villi were studied and classified according to the criteria. According to DAKO recommendations by means of immunohistochemical method further detection of antigen Ki-67 expression in nucleus of trophoblast structures was determined (polymeric system of detection with the stain diaminobenzidine). The number of Ki-67-positive nuclei was calculated in per mille. Statistically significant were differences with $p \leq 0,05$. The results are presented in table.

Table

Groups	Number of examined placentas	Ki-67-positive nuclei (‰)
33-36 weeks of gestation		
The main group №1 – the examination of combined IDAG and preterm maturing of the chorial tree	20	54±1,3 p2<0,001 p3<0,001
The comparison group №2 – the examination of preterm maturing of the choroid tree without any anemia	22	24±1,0 P3<0,001
37 - 40 weeks of gestation		
The group №3 - physiological pregnancy	21	3±0,1

Note. P2 – odd probability of the mean values between the main group №1 and the comparison group №2. P3 – odd probability of the mean values between the main group №1 (or comparison group №2) and group №3.

Preterm maturation of the chorionic tree and iron deficiency anemia of pregnancy both separately and in their combination result in intensification of proliferation processes in the placental chorionic villous trophoblast.

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PROLIFERATION ACTIVITY OF TROPHOBLAST OF THE PLACENTA CHORIONIC VILLI IN CASE OF INFLAMMATION WITH UNDERLYING IRON DEFICIENCY ANEMIA OF PREGNANT WOMEN

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Many scientific studies deal with the issues of inflammation of manure and iron deficiency anemia of pregnant women, due to the high frequency of these conditions. However, it is important to investigate their interaction, in order to expand and supplement the information base of the pathomorphology of placental insufficiency, which is a common morphological manifestation for these conditions. At this stage we will try to study the immunohistochemical features of the proliferation processes of the trophoblast of the placenta chorionic villi in case of chronic basal deciduitis of pregnant women with iron deficiency anemia.

82 placentas were selected for immunohistochemical examination. The distribution by groups is presented in the table. The material was preserved for 20-22 hours in a buffered neutral 10% formalin solution, followed by dehydration in an ascending battery of alcohols and casting in paraffin at 56°C. Monoclonal antibodies to Ki-67 protein with streptavidin-biotin imaging using the LSAB kit were used for the procedure. The number of Ki-67-positive nuclei of the trophoblast of



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.

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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.

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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