was fixed in 10% neutral formalin, and after wiring, the tissue was transferred to paraffin. Histological preparations were prepared. The slides were stained with hematoxylin-eosin and Van Gieson’s stain.

Results of the study. Microscopic examination of the extraplacental tissues of the afterbirth, which are represented by three membranes – amniotic, chorionic and intimate adjacent decidual, in case of premature amniotic fluid discharge is characterized by heterogeneity of structure. Thus, in contrast to the membranes in case of timely amniotic fluid discharge, in case of premature rupture of the membranes at their edge, there is a pronounced swelling of all elements of the membranes.

 Destruction of epithelial cells and their degenerative changes were observed in the amnion. There was no clear boundary between the amnion and the smooth chorion. In many preparations, with premature amniotic fluid discharge and an increase in the anhydrous interval of more than 8 hours, dystrophic changes in the epithelium, expressed transformations into a continuous cuticular cluster, were noted.

In case of premature amniotic fluid discharge, focal, and less often diffuse infiltration with segmented leukocytes was detected in the membranes. It was detected in the decidual layer of the periepithelial membranes during a prolonged waterless period of more than 6-8 hours.

Thus, a prolonged waterless period is not always accompanied by leukocyte infiltration of the parietal membranes. However, with an increase in the water-free interval of more than 6 hours, the first manifestations of parietal deciduitis may appear, and after 8 hours – chorioamnionitis. These data are consistent with the results of our simultaneous bacteriological studies.

Conclusions. The detected changes in the amnion and chorion, with a minimal anhydrous interval, are characterized by destruction of epithelial cells, degenerative changes, lack of a clear boundary between the amnion and chorion, changes in the intercellular space, swelling.

Key words: placental membranes, premature rupture of membranes.

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FEATURES OF THE FUNCTIONAL MORPHOLOGY OF THE PLACENTA IN CASE OF PREMATURE AMNIOTIC FLUID DISCHARGE
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Premature discharge of amniotic fluid creates conditions for ascending infection of the placenta, fetus and newborn, disruption of uteroplacental blood circulation with the subsequent development of fetal distress. The placenta is one of the first barriers that help limit exposure to harmful substances. Dysfunction of the placenta can contribute to complications that increase the morbidity and mortality of both the fetus and the newborn.

The study aimed to determine the morphological features of the placenta in case of premature discharge of amniotic fluid.
Ninety placetas of women with the premature and timely discharge of amniotic fluid were examined using a standardized method of organo- and morphometry.

In 42% of cases, there was a central attachment of the umbilical cord, in 35% (24/69) – lateral and in 1% – membrane. The length of the umbilical cord was 61.62±3.8 cm, and the distance from the place of the membranes to the edge of the placenta was 14.36±3.8 cm. In 41% (28/69) placentas, the course of the vessels was main, in 40% (27/69), it was mixed and in 20% (14/69) dispersed.

The intervillous space with the premature discharge of amniotic fluid was empty in only three observation cases (4%). In other cases (96%), it is uneven, in some places sharply narrowed, up to its complete disappearance (the focus of acute infarction). In 10 observations (15%), the intervillous space was centrally expanded with the accumulation of blood and the formation of haemorrhages. In others, it is filled with single erythrocytes and exfoliated syncyntial elements. In 8 observations (12%) in the intervillous space, single and concentrated accumulations of segmented nuclear leukocytes were found - focal intervillitis.

Early signs of "ageing" of the placenta with the premature discharge of amniotic fluid and disruption of uteroplacental blood flow were revealed. The presence of "infarctions" of the placenta, partial thrombosis, and uneven blood vessels contributed to a synchronous increase in fetal distress.

**Key words:** placenta, premature discharge of amniotic fluid.

Object and research methods.

To determine the changes in the placenta, we conducted a pathomorphological simultaneous study of the placentas of 90 women. In the case of full-term pregnancy and premature discharge of amniotic fluid, 69 placentas were examined. Controls were 21 placentas with the timely discharge of amniotic fluid in pregnant women after urgent labour with a physiological course.

The collection of material for histological examination was carried out according to the generally accepted method. Placentas were studied by a standardized method of organo – and morphometry. The presence of infarctions (white, red, single, multiple) was noted on the maternal surface. The structure of the maternal and fetal surfaces was evaluated.

For histological examination, slices were cut from the central, para-central and marginal zones through the entire thickness of the placenta. The obtained material was fixed in 10% neutral formalin after the tissue was embedded in paraffin. Prepared sections were stained with hematoxylin and eosin and according to Van Gieson.

Statistical processing of the obtained data was carried out using variational statistics and non-parametric methods.

Research results and their discussion.

During the macroscopic examination of the placenta, the colour of the maternal and fetal surfaces, the presence and number of infarcts of intervillous thrombi, and their location, size, and consistency were noted. The placental-fetal coefficient (PFC) was calculated based on the ratio of placenta mass to fetal mass. The features of the vascular wall of the fetal surface of the placenta were characterized, and the following types of vessels were distinguished: main, dispersed, and mixed. When macroscopically examining the maternal surface of the placenta in women with the premature discharge of amniotic fluid, it should be noted that the structure of the placenta was medium-lobulated in 50% (34/69) of cases and large-lobulated in 11% (8/69) in 22% (15/69) small lobules, and in 11% (8/69) of observations, the presence of additional lobules was noted. Sulcuses were pronounced in 38% of cases and smoothed in others. In 44% (30/69) of observations, multiple salt deposits of different shapes were noted. Single salt deposits are found in 16% (11/69), and infarctions 3×4 cm in size...
are found in 16% of observations, indicating premature placenta maturation in women with the premature discharge of amniotic fluid. The dimensions of the placenta were 18.3±2.8×17.3±1.3×3.1±0.9 cm. According to Schultz, central separation of the placenta was noted in 72% (65/90) of the observations.

In 64% (44/69) of cases, there was a central attachment of the umbilical cord; in 35% (24/69) – lateral and in 1% (1/69) – membrane. The length of the umbilical cord was 61.6±8.3 cm, and the distance from the place of the membranes to the edge of the placenta was equal to 14.36±3.8 cm. In 41% (28/69) of the placentas, the vascular course was main; in 39% (27/69), it was mixed and in 20% (14/69) dispersed.

In women with the premature discharge of amniotic fluid, a significantly greater number of fibrous formations were found in the placentas compared to the control group with the timely discharge of amniotic fluid. Fibrinoids are found around and inside the villi in the form of islands or strips located around the vessels and represent a functional fibrous structure, which in the case of premature discharge of amniotic fluid leads to a decrease in the exchange surface and contributes to the disruption of uteroplacental blood circulation [4]. In preparations, fibrinoid is a homogeneous structural mass, which was more intensively stained with hematoxylin-eosin during premature discharge of amniotic fluid.

The pathomorphological picture of the chorion with the premature discharge of amniotic fluid is visualized ambiguously. In 29% (20/69) of the placentas, moderate hyperemia and uneven and sharp hyperemia of the villi were noted. As the waterless space in the placenta lengthens, villi thicken; when villitis occurs, vessels move closer to the periphery, syncytial-vascular membranes become thinner, cells of a compact arrangement of villi with the absence of intervillous space, accumulation of syncytial nuclei in these areas in the form of various shapes (triangles, etc.) are observed. The walls of the vessels of the chorionic plate are homogenized and sharply metachromatic, with endothelium exploding into the lumen. Many areas with villi embedded in the fibrinoid mass were found. Villi are deformed with sclerosed stroma and collapsed vessels. At the same time, the intervillous space is expanded and filled with blood. It characterizes an acute violation of placental blood circulation. In addition, against the background of impaired blood circulation, dystrophy and necrosis, signs of “ageing” are observed. The chorionic plate is swollen and stratified. The amniotic layer is peeled off in places, papillary villi have formed elsewhere, the slits and strips of the plates are filled with edematous fluid, and the cellular layer is thinned and interrupted in places.

In the intervillous space, vesicles, less often in the intermediate villi, a focal stasis of blood with the release of plasma, indistinct contours of erythrocytes, and accumulation of segmented leukocytes – the development of partial thrombosis was revealed. Such a pathomorphological picture was noted in 12 observations (17%) with a waterless interval of 11 hours or more.

It should be noted that moderately uneven blood circulation is observed in all placentas of women in labour with the premature discharge of amniotic fluid and the duration of the waterless interval of 8 or more hours. As the waterless interval increases beyond 10 hours, the frequency of intraterine hypoxia of the fetus increases [5]. The latter is observed in every third child. In the placentas, at the birth of children in a state of asphyxia, focal uneven blood vessels, signs of blood stasis, and small acute infarcts with an accumulation of syncytial nuclei of various shapes were found. The number of such clusters reaches 41-50% per 500 villi.

In control placentas, the number of villi with signs of fibrinoid necrosis was noted within 4% (1/21), with the premature discharge of amniotic fluid up to 15% (10/69), i.e. 3.8 times more often.

The intervillous space with the premature discharge of amniotic fluid was empty in only three observation cases (4%). In other cases, 6% (6/69) is uneven, sharply narrowed in some places, up to its complete disappearance (the focus of an acute infarction). In the placentas of women of the main group, in 10 observations (14%), the intervillous space was centrally expanded with the accumulation of blood and the formation of haemorrhages. In other, 59 placentas (86%) – were filled with single erythrocytes, exfoliated syncytial elements. In 8 observations (11%) in the intervillous space, single and concentrated accumulations of segmented nuclear leukocytes were found – focal intervillits.

In the decidual membrane, necrotic processes characteristic of a mature placenta was noted. Among the fibrinoid structures, decidual cells with erased contours up to the point of lysis, with pericellular oedema, prevailed. Multiple areas of functioning decidual elements were found among the necrotic processes. Thus, in 9/69 observations (13%), pronounced reactive manifestations were found, indicating the activity of decidual cells. These are large decidual cells of a polygonal shape with clear contours, a large cytoplasmic and nuclear disorganization with signs of nuclear mitosis. The increase in the number of septa in placentas by up to 17% and the increase in the number of anchor functioning villi in them (in 12/69 observations) is noteworthy, which can be considered as a compensatory reaction aimed at improving the metabolic processes in the placenta in case of premature discharge of amniotic fluid, unlike placentas with the timely discharge of amniotic fluid.

Interestingly, in the decidual membrane with the premature discharge of amniotic fluid, a disorder of maternal blood flow is also revealed in the form of uneven hyperemia. It is also noted in the septa it is more pronounced when the duration of the waterless interval increases, which was not observed in the control group.

In the decidual membrane of the placenta, infiltration with cellular and segmented leukocytes is more often manifested, corresponding to the duration of the waterless interval 6, especially eight or more hours. No leukocyte infiltration was detected with the timely discharge of amniotic fluid and the premature discharge of amniotic fluid with a waterless interval of up to 6 hours.

It should be noted that polymorphonuclear infiltration of the decidual and other tissues of the placenta, although frequent, is not a mandatory attribute of premature discharge of amniotic fluid and a long waterless interval. Thus, in one observation at a gestation period of 42 weeks and the duration of an anhydrous period up to 17 hours, at the birth of a fetus weighing 3000 g and manifestations of placental collagenosis, leukocyte infiltration was not detected.
При передчасному вилитті навколоплідних вод створюються умови для висхідного інфікування плаценти, плода і новонародженого, відбувається порушення маткovo-плацентарного кровообігу з наступним розвитком дистресу плода. Плацента один із перших бар'єрів, що сприяє обмеженню впливу шкідливих речовин. Дисфункція плаценти може сприяти розвитку заковалення, які підвищують захворюваність та смертність як плода, так і новонародженого.

Локалізація патології плаценти являє собою актуальну проблему філогенії плаценти.

Вступ.

Загальными показниками патології плаценти при передчасному вилитті навколоплідних вод є порушення маткovo-плацентарного кровообігу, які призводять до гіпоксії плода. Спостережень патології плаценти при передчасному вилитті навколоплідних вод характеризують наявність «інфарктів» плацент, часткового тромбозу, перфорації сосудів, які призводять до гіпоксії плода. Плацента відіграє вагому роль в формуванні компенсаторних механізмів у системі мати-плацента-плід при передчасному вилитті навколоплідних вод.

Зв’язок публікації з плановими науково-дослідними роботами.

Завданням дослідження було визначення морфологічних особливостей плаценти при передчасному вилитті навколоплідних вод.

Метою дослідження було визначення морфологічних особливостей плаценти при передчасному вилитті навколоплідних вод.

Метою дослідження було визначення морфологічних особливостей плаценти при передчасному вилитті навколоплідних вод.

Аналіз виконано стандартними методами органо-і морфометрично.
При передчасному вилитті навколоплідних вод у 20 – 25 відсотків жінок розвивається порушення схоропливої діяльності матки, яке проявляється слабкіс-тью, що потребує не тільки застосування утеротоніків, але і дистрес плода збільшує відсоток кесарського розтину [3].

Мета дослідження. Визначення морфологічних особливостей плаценти при передчасному вилитті навколоплідних вод.

Об’єкт і методи дослідження. Для визначення змін в плаценті нами проведене патоморфологічне синхронне вивчення плацент у 90 жінок. При доношеній вагітності і передчасному вилитті навколоплідних вод досліджено 69 послідів. Контролем слугувала 21 плацента при своєчасному вилитті навколоплідних вод у вагітних після термінових пологів із фізіологічним перебігом. В статистичному аналізі використовувались методи статистичного аналізу матеріалів.

Статистична обробка отриманих даних проводилася за загальноприйнятим методом. Плаценти були вивчені стандартизованим методом органо- і морфометрії. На материнській поверхні відмічалися наявність інфарктів (білих, червоних, поодиночні, множинні, різної форми сольових відкладень. В 44% (30/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольча- стою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольча- стою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольча- стою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацenta була середньодольчас- тою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольча- стою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольча- стою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольчастою, в 29% (20/69) помірно дольчастою. Борозни у 38% (34/69) випадків плацента була середньодольч
Вступ.

У розвитку плода важливе місце займає плацента, яка приймає участь у транспорті реєнеративних процесів, виконує важливий імунний захист. Особливості морфологічних реакцій плаценти, зумовлені патологічними змінами в організмі, характеризують стан плода та новонародженого.

Об’єкт і методи дослідження.

Для визначення змін в плаценті проведено патоморфологічне синхронне дослідження вагітностей, які прийшли до нерівномірного повнокрів'я судин.

Висновки.

При передчасному вилитті навколоплідних вод в плацентах відбуваються ранні ознаки «старіння»: зменшення товщини, порушення матково-плацентарного кровоплину, збільшення кількості інфарктів, нерівномірне повнокрів'я судин.

Плануємо подальше вивчення патоморфологічних особливостей плаценти при вагітності на тлі ендотеліальної дисфункції.

References / Література


ОСОБЛИВОСТІ ФУНКЦІОНАЛЬНОЇ МОРФОЛОГІЇ ПЛАЦЕНТИ ПРИ ПЕРЕДЧАСНОМУ ВИЛИТТІ НАВКОЛОПЛІДНИХ ВОД

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Резюме.

Вступ. У розвитку плода важливе місце займає плацента, яка приймає участь у транспорті речовин, секреції гормонів, виконує важливий імунний захист. Особливості морфологічних реакцій плаценти, компенсаторних механізмів у системі мати-плацента-плід при передчасному вилитті навколоплідних вод характеризуються стабільно та новонародженого.

Мета дослідження. Визначення морфологічних особливостей плаценти при передчасному вилитті навколоплідних вод.

Об’єкт і методи дослідження. Для визначення змін у плаценті проведене патоморфологічне синхронне вивчення 69 плацент жінок при передчасному вилитті навколоплідних вод. Контролем служила 21 плacente
Placental basal and septal deciduitis and, rarely, intervillusitis are added. Decreased thickness, impaired uteroplacental blood flow, increased number of infarcts, uneven vascular fullness.

In 10 observations (14%), the interventricular space was focally dilated with blood accumulation – empty. In other cases (96%), it was uneven, sometimes sharply narrowed, up to complete disappearance (focus of membranes, the formation of foci of compact arrangement of villi with the absence of intervillous space is observed.

With the lengthening of the anhydrous gap in the placenta, thinning of the syncytial vascular membranes, the formation of foci of compact arrangement of villi with the absence of intervillous space is observed.

In 22% (15/69) of cases, and in 22% (15/69) – large lobular, in 11% (8/69) – small lobular, and in 11% (8/69) of observations predominated signs of «aging»: decreased thickness, impaired uteroplacental blood flow, increased number of infarcts, uneven vascular fullness. In case of premature amniotic fluid discharge, it should be noted that the structure of the placenta was cardiolobular in 50% (34/69) of cases, and in 50% (34/69) – empty. In other cases (50%), the intervillous space was focally dilated with blood accumulation – empty. In other cases (96%), it was uneven, sometimes sharply narrowed, up to complete disappearance (focus of membranes, the formation of foci of compact arrangement of villi with the absence of intervillous space is observed.

The intervillous space in case of premature amniotic fluid discharge was of normal structure only in 3 cases (4%) – empty. In other cases (96%), it was uneven, sometimes sharply narrowed, up to complete disappearance (focus of acute infarction). In 10 observations (14%), the interventricular space was focally dilated with blood accumulation and hemorrhage formation.

Conclusions. In case of premature amniotic fluid discharge, early signs of “aging” are noted in placentas: decreased thickness, impaired uteroplacental blood flow, increased number of infarcts, uneven vascular fullness. If the duration of the waterless interval is 8 hours or more, parietal deciduitis develops first, then chorioamnionitis. In case of premature amniotic fluid discharge characterize the condition of the fetus and the newborn.

Abstract. Introduction. The placenta plays an important role in the development of the fetus, participating in the transport of substances, hormone secretion, and performing important immune protection. Features of the morphological reactions of the placenta, compensatory mechanisms in the mother-placenta-fetus system in case of premature amniotic fluid discharge characterize the condition of the fetus and the newborn.

The purpose of the study. The aim of the study was to investigate the morphological features of the placenta in premature amniotic fluid discharge.

Object and methods of the study. To determine the changes in the placenta, a pathomorphological synchronous study of 69 placentas of women with premature amniotic fluid discharge was performed. The control group consisted of 21 placentas with timely amniotic fluid discharge after urgent physiological labor. The placentas were examined by a standardized method of organ and morphometry. The structure of the maternal and fetal surface was evaluated.

Results of the study. In the macroscopic examination of the maternal surface of the placenta in women with premature amniotic fluid discharge, it should be noted that the structure of the placenta was cardiolobular in 50% (34/69) of cases, and in 22% (15/69) – large lobular, in 11% (8/69) – small lobular, and in 11% (8/69) of observations the presence of additional lobes was noted. Pathologic examination of 29% (20/69) of placentas showed moderate full blood flow of villi. With the lengthening of the anhydrous gap in the placenta, thinning of the syncytial vascular membranes, the formation of foci of compact arrangement of villi with the absence of intervillous space is observed.

The intervillous space in case of premature amniotic fluid discharge was of normal structure only in 3 cases (4%) – empty. In other cases (96%), it was uneven, sometimes sharply narrowed, up to complete disappearance (focus of acute infarction). In 10 observations (14%), the interventricular space was focally dilated with blood accumulation and hemorrhage formation.

Conclusions. In case of premature amniotic fluid discharge, early signs of “aging” are noted in placentas: decreased thickness, impaired uteroplacental blood flow, increased number of infarcts, uneven vascular fullness. If the duration of the waterless interval is 8 hours or more, parietal deciduitis develops first, then chorioamnionitis.
Chronic spontaneous urticaria is one of the most common allergic pathologies, and its impact on the quality of life of patients and the economic burden on the healthcare system determines the relevance of research to find an optimal management strategy. The work aimed to investigate the indicators of the quality of life of patients with severe chronic urticaria and to study the effect of omalizumab in comparison with desloratadine on the quality of life of patients to optimize treatment tactics. The prospective study included one hundred four patients with a clinical diagnosis of severe (according to the UAS7 scale) chronic spontaneous urticaria. In all patients, complaints were evaluated, anamnesis was studied, and a physical examination was performed. The SKINDEX-29 questionnaire was used to assess the quality of life. Patients were randomly divided into two groups: Group 1 (n=54) received one injection of omalizumab 150 mg every 21 days three times. Indicators of urticaria activity scale and quality of life were determined before treatment and ten days after each omalizumab injection. Group 2 (n=50) was prescribed desloratadine at 5 mg for the first four weeks and 20 mg for the next four weeks. Urticaria activity scale indicators and quality of life were determined before the start of treatment and five and nine weeks after the start of treatment. The patients included in the study are mostly of working age. The quality of life of the patients deteriorated in all areas. Against the background of treatment in Group 1, the severity of urticaria, the expressiveness of physical symptoms, the emotional sphere, functioning improved, and the overall assessment of the negative impact of the disease on the quality of life decreased significantly. In Group 2, the severity of urticaria and all indicators of the negative effect of the disease on quality of life also considerably reduced. However, at the end of the observation, the severity of urticaria and all domains of the negative impact of the disease on the quality of life remained pronounced in patients of this group. Treatment with omalizumab at a dosage of 150 mg once every 21 days in this patient category can be considered an effective therapy method that eliminates the symptoms of urticaria and significantly improves the quality of life.

Key words: urticaria, quality of life, monoclonal antibodies, antihistamines, rash, itching, allergopathology, dermatology, immunoglobulin E.