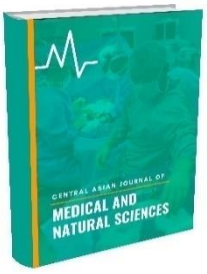
CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES



Volume: 04 Issue: 06 | Nov-Dec 2023 ISSN:2660-4159

www.cajmns.centralasianstudies.org/index.php

PREGNANCY AND UNDIFFERENTIATED CONNECTIVE TISSUE DYSPLASIA

1. Khudoyarova Dildora

2. Gulandon Zikiryaevna

3. Yunusova Zarnigor

Received 20th Oct 2023,
Accepted 24th Nov 2023,
Online 21st Dec 2023

Samarkand state medical university[1 2 3]

Annotation: *The article describes the analysis of undifferentiated connective tissue dysplasia in pregnant women, studying the manifestations and impact on the course of pregnancy. The study was conducted at the Department of Obstetrics and Gynecology No. 1 of Samarkand Medical University. The study analyzed the available modern literature on the basis of worldwide scientific databases. The study examined the manifestations of UCTD, interaction with pregnancy, incidence and methods of preventing complications.*

Key words: pregnancy, undifferentiated connective tissue dysplasia (UCTD), complications, isthmic-cervical insufficiency (ICI), antepartum rupture of membranes (APRO), premature birth.

Relevance. Most of the scientific works related to the study of undifferentiated connective tissue dysplasia (UCTD) are devoted primarily to cardiological and pulmonary pathology, diseases of the skeletal system, as well as autoimmune processes (N.S. Volchkova, 2016; R.O. Demidov et al, 2015). The frequency of UCTD ranges from 20 to 30% of the reproductive population of women (S.N. Styazhkina, 2015). There are very few studies in the literature devoted to assessing the course of pregnancy and birth outcomes depending on the severity of UCTD manifestations. There is also insufficient data on laboratory research methods in pregnant women suffering from UCTD; accordingly, medical tactics in relation to such patients are not clearly defined.

At present, a systematic understanding of the needs of pregnant women suffering from UCTD for the necessary types of medical and social care and treatment and diagnostic services during gestation and childbirth has not yet been formed. The question also remains open about the need to develop an organizational and methodological framework for additional examination and treatment of pregnant women suffering from UCTD. Understanding the typical features of hemostasis functioning in conditions of UCTD is important in obstetrics, where any change in blood rheology can be fatal for both the mother and the fetus.

Many authors point to the low detection, low recognition and lack of clear laboratory criteria for

diagnosing UCTD syndrome, which has the ability to unexpectedly result in extremely adverse consequences, especially in obstetric practice. However, the prevalence of this syndrome in patients who underwent hysterectomy for massive postpartum hemorrhage was 96.5% according to a study by G.N. Maslyakova (2014).

Goal of work: study modern literature over the last 10 years on undifferentiated connective tissue and pregnancy.

Materials and methods. The study was carried out using the method of continuous retrospective analysis of modern literature over the past 10 years in international and domestic databases - Scopus, Web of Science, SpringerLink, cyberleninka, elibrary and others.

Results. A multicentral study on 224 pregnant women in UCTD was conducted by Massimo Radin and co-authors (2020), analyzing them they gave the following data: 177 (79%) pregnancies ended in live birth, 45 (20.1%) in miscarriage (defined as pregnancy loss before 12 weeks of gestation), 2 (0.9%) - stillbirth (pregnancy loss). after 20 weeks of pregnancy) and in 6 (2.7%) cases intrauterine growth retardation was observed. Miscarriages and stillbirths were strongly associated with the presence of aPL and ENA antibodies ($P < 0.05$). Complications of pregnancy in the mother were as follows: preeclampsia developed in 5 (2.2%) cases, gestational hypertension in 11 (4.9%) cases and gestational diabetes in 12 (5.4%) cases. Joint involvement represented the most common clinical manifestation in the group (57.9%), followed by RP (40.6%), photosensitivity (32.3%), and hematological manifestations (27.1%). The rate of disease progression in our cohort from diagnosis of UCTD to diagnosis of definite CTD was 12% in an average of 5.3 ± 2.8 years. With a total follow-up period of 1417 patient-years after the first pregnancy, we observed the development of a specific CTD in one out of every 88 patient-years [6].

We conducted a similar study at the Tula Regional Perinatal Center T.S. Fadeev and co-authors (2019). They studied the course of pregnancy in 190 women with clinical manifestations of UCTD, while the severity of the clinical manifestation of connective tissue dysplasia was established according to the criteria of Smolnova T.Yu. et al. (2003). They determined that there is a direct relationship between the severity of UCTD and complications in the form of placental insufficiency and premature birth. An increase in the severity of dysplasia in the subjects led to an increase in the proportion of women with the threat of early termination of pregnancy in the first, second or third trimester ($p>0.05$). Placental insufficiency was found in 43%, with chronic intrauterine hypoxia and fetal growth restriction syndrome [12-13].

The work of I.S. Kononenko deserves special attention. (2020), who studied complications such as isthmic-cervical insufficiency (ICI) in women with UCTD using molecular genetic typing. As part of a case-control study, the author examined 71 patients with a singleton intrauterine pregnancy at 22-24 weeks, 36 of whom had ICI (main group). Using allele-specific polymerase chain reaction (AS-PCR), molecular genetic typing of the examined patients was performed using polymorphic loci of the TGFβ1, MMP9 genes, encoding proteins that are involved in connective tissue metabolism. The content of TGFβ1 and MMP9 in the blood serum of the examined patients was determined by enzyme-linked immunosorbent assay (ELISA). According to his study, the author found that there is an association of these genotypes with a statistically significant increase in the serum concentration of the proteins they encode, which allows us to consider these polymorphic variants of the TGFβ1 and MMP9 genes as genetic markers of the formation of ICI in patients with UCTD [9].

Also in another work by Fadeeva T.S. (2019), Konenko I.S. (2018) noted that in women with UCTD with vitamin D deficiency, complications such as threatened abortion in the 2nd trimester,

placental abruption, ICI, preeclampsia, anemia of pregnant women and placental insufficiency were significantly more common [9, 12, 13].

Ilyina I.Yu. et al. (2021) worked to improve perinatal outcomes based on collagen metabolism in the setting of hypomagnesemia in women with UCTD. In a study of 155 pregnant women, they found that a reduced level of magnesium in the blood plasma of pregnant women significantly worsens the prognosis of pregnancy and childbirth [11].

Smirnova T.L. et al. (2018), when analyzing the available literature, also stated that there were numerous complications in patients with UCTD for both the mother and the fetus. Thus, the frequency of complications: malformations of intrauterine development were present in 8.62%, the frequency of premature births is high and asphyxia is observed in 25% of newborns, cerebrovascular accident in newborns is observed in 21.0-48.3% of cases, birth trauma of newborns is diagnosed in 34 .4% [17].

Authors from Azerbaijan are currently assessing the course and outcomes of pregnancy in women with undifferentiated connective tissue dysplasia. Kadimova Sh.G. (2023) in their works confirms the literature data on the presence of complications both during pregnancy and during childbirth [1].

Problems that arise during pregnancy can also aggravate the postpartum period. In addition, there are studies showing long-term consequences that worsen the quality of life of women.

Many of our scientists are conducting research on the issue of UCTD in women. One of which is Urinova R.Sh. et al. (2022), who argue that understanding the characteristics of connective tissue metabolism, namely an increase in the level of hydroxyproline in the urine, and early detection of its disorders can form the basis for preventing the formation and progression of genital prolapse in reproductive age, as is known one of the most common postpartum complications [22].

Conclusion. Summing up the results of the analysis of modern literature, we can clearly say that UCTD is present in the majority of representatives of reproductive age and is a risk factor for complications of pregnancy and childbirth. In addition, the main complications of pregnancy are disturbances in placental blood flow, which entails consequences not only for the mother, but also for the fetus. Available studies show the genetic dependence of the manifestation of UCTD and the influence of its severity on the course of pregnancy.

Based on this, we can conclude that a more in-depth study of this syndrome is required to prevent pregnancy complications and perinatal outcomes.

References:

1. KADIMOVA S. G. PREGNANCY OUTCOMES IN WOMEN WITH UNDIFFERENTIATED CONNECTIVE TISSUE DYSPLASIA //EXPERIMENTAL AND CLINICAL MEDICINE GEORGIA. – 2023. – №. 5.
2. Khudoyarova D., Rabbimova N., Sultanbayev S. GENERAL CLINICAL CHARACTERISTICS OF THE EXAMINED PREGNANT WOMEN //International Bulletin of Applied Science and Technology. – 2023. – Т. 3. – №. 10. – С. 612-615.
3. Khudoyarova R. Dildora, Shavkatova Z. Aziza. OZONE THERAPY IN THE TREATMENT OF PREGNANT WOMEN WITH FETOPLACENTAL INSUFFICIENCY// Journal of Biomedicine and Practice. 2023, vol. 8, issue 3, pp.17-27
4. Enverovna K. V., Rakhimovna K. D. THE EFFECTIVENESS OF REHABILITATION MEASURES IN WOMEN WITH A UTERINE SCAR //International Journal Of Management And Economics Fundamental. – 2023. – Т. 3. – №. 11. – С. 37-43.

5. Pulatov U., Hamdullaev M. LUS THERAPY IN PREGNANT WOMEN WITH CHRONIC RHINOSINUSITIS //Zamonaviy dunyoda tabiiy fanlar: Nazariy va amaliy izlanishlar. – 2022. – Т. 1. – №. 18. – С. 37-40.
6. Radin M. et al. A multicentre study of 244 pregnancies in undifferentiated connective tissue disease: maternal/fetal outcomes and disease evolution //Rheumatology. – 2020. – Т. 59. – №. 9. – С. 2412-2418.
7. Rizaev J.A., Ahrorova M.Sh., Kubaev A.S., Hazratov A.I.; ,Morphological Changes in the Oral Mucous Membrane in Patients with COVID-19,American Journal of Medicine and Medical Sciences, 12, 5, 466-470, 2022
8. Alimjanovich, Rizaev Jasur; Shavkatovna, Akhrorova Malika; Saidolimovich, Kubaev Aziz; Isamiddinovich, Khazratov Alisher; ,CLINICAL AND IMMUNOLOGICAL ASPECTS OF THE RELATIONSHIP OF THE ORAL CAVITY AND COVID-19, Thematics Journal of Education, 7, 2, 2022
9. Кононенко И. С. Полиморфизмы генов трансформирующего ростового фактора β1 и матриксной металлопротеиназы 9 как молекулярно-генетические предикторы формирования истмико-цервикальной недостаточности у пациенток с недифференцированной дисплазией соединительной ткани //Вестник Витебского государственного медицинского университета. – 2020. – Т. 19. – №. 3. – С. 50-58.
10. Zucchi D. et al. Pregnancy and undifferentiated connective tissue disease: outcome and risk of flare in 100 pregnancies //Rheumatology. – 2020. – Т. 59. – №. 6. – С. 1335-1339.
11. Ильина, И. Ю. Влияние дефицита магния на перинатальные исходы у пациенток с дисплазией соединительной ткани и без нее / И. Ю. Ильина, А. А. Чикишева, Ю. Э. Доброхотова // Акушерство и гинекология. – 2021. – № 1. – С. 140-146. – DOI 10.18565/aig.2021.1.140-146. – EDN WKILOU.
12. Фадеева Т. С., Молоканова М. В., Павлов О. Г. Влияние степени тяжести недифференцированной дисплазии соединительной ткани на течение беременности //Вестник новых медицинских технологий. Электронное издание. – 2019. – Т. 13. – №. 3. – С. 12-17.
13. Фадеева Т. С., ГейМерлинг В. Э., Юдина А. С. Роль степени тяжести недифференцированной дисплазии соединительной ткани в течении родов и раннего послеродового периода //Вестник новых медицинских технологий. Электронное издание. – 2019. – Т. 13. – №. 4. – С. 7-12.
14. Курбаниязова В. Э., Ахтамова Н. А., Хамидова Ш. М. Интенсивное восстановление женщин репродуктивного возраста перенесших операцию Кесарево сечение //Проблемы биологии и медицины. – 2019. – №. 4. – С. 53-55.
15. Сарыева О. П. и др. Патоморфология внеплацентарных оболочек при их преждевременном разрыве и недифференцированной дисплазии соединительной ткани у женщин //Архив патологии. – 2019. – Т. 81. – №. 4. – С. 26-32.
16. Сац, Ю. Н. Недифференцированная дисплазия соединительной ткани как предиктор перинатальных осложнений / Ю. Н. Сац, Т. В. Новицкая // Здоровье для всех : Материалы VIII международной научно-практической конференции, посвященной 10-летию научно-исследовательской лаборатории лонгитудинальных исследований, Пинск, 18–19 апреля 2019 года / Министерство образования Республики Беларусь;

главный редактор К.К. Шебеко. – Пинск: Полесский государственный университет, 2019. – С. 91-93. – EDN LBKNWT.

17. Смирнова Т. Л., Л. И. Герасимова, А. Е. Сидоров [и др.] Особенности течения беременности и родов у женщин с синдромом недифференцированной дисплазии соединительной ткани // Практическая медицина. – 2018. – № 6. – С. 39-44. – EDN YBTOKD.
18. Тоджиева Н. И., Худоярова Д. Р., Базарова З. З. Совершенствование методов лечения гиперпластических процессов эндометрия в пременопаузе //Профессионал года. – 2018. – Т. 2018. – С. 81-84.
19. Хомидова Ш. М. Уровень антимюллерова гормона у женщин с преждевременным истощением яичников //Достижения науки и образования. – 2020. – №. 3 (57). – С. 104-107.
20. Худоярова Д. Р., Уктамова Ю. У., Шопулотова З. А. ИННОВАЦИИ В КОМПЛЕКСНОМ ЛЕЧЕНИИ ХРОНИЧЕСКОГО ВОСПАЛЕНИЯ ПРИДАТКОВ МАТКИ //ЖУРНАЛ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ И УРО-НЕФРОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ. – 2023. – Т. 4. – №. 4.
21. Шопулотова З. А., Худоярова Д. Р. ХРОНИЧЕСКИЙ ПИЕЛОНЕФРИТ И БЕРЕМЕННОСТЬ: ВЛИЯНИЕ КОМОРБИДНОСТИ И ЕГО ПРОЯВЛЕНИЯ //ЖУРНАЛ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ И УРО-НЕФРОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ. – 2023. – Т. 4. – №. 4.
22. Уринова Р. Ш. и др. Роль недифференцированной дисплазии соединительной ткани в развитии пролапса гениталий у женщин репродуктивного возраста. – 2022.