



## FEATURES OF THE COURSE OF PREGNANCY IN WOMEN WITH A HISTORY OF ENDOMETRITIS.

**Komila T. Yoqubova**

Master of the Department of Obstetrics and Gynecology № 2, Tashkent Medical Academy, Tashkent Uzbekistan, [husanovaakom98@gmail.com](mailto:husanovaakom98@gmail.com);

**Fatima A. Ataxodjaeva**

Associate Professor of the Department of Obstetrics and Gynecology № 2, Tashkent Medical Academy, Tashkent Uzbekistan.

Article history:	Abstract:
<b>Received:</b> April 11 <sup>th</sup> 2023 <b>Accepted:</b> May 11 <sup>th</sup> 2023 <b>Published:</b> June 20 <sup>th</sup> 2023	The existing problem among inflammatory diseases of the pelvic organs in women, especially endometritis, still remains one of the main problems of gynecological theory and practice. Today, this problem has not lost its relevance due to an increase in the incidence of endometritis due to the variety of various intrauterine manipulations, an increase in the number of abortions, the use of intrauterine contraception, as well as an increase in the incidence of sexually transmitted diseases. Significantly revealed the peculiarity of the course of pregnancy in women who suffered endometritis.

**Keywords:** Pregnancy, endometritis, intrauterine infection

**OBJECTIVE:** To study the clinical features of the course of pregnancy in women with a history of morphologically verified endometritis. All women received treatment in terms of preconception preparation.

### INTRODUCTION:

Endometritis in women planning pregnancy is currently considered as a risk factor for the development of a number of obstetric and perinatal complications [2]. However, most studies are devoted to the problem of early reproductive losses in women with a history of endometritis [1]. Complications of the II and III trimester of pregnancy and perinatal outcomes remain less studied in these patients. It should be borne in mind that endometritis is a disease of women mainly of the childbearing period (at the age of 25-35 years, women with endometritis account for up to 98%), so it should be noted that this disease has a great impact on the reproductive system of patients. Therefore, to study this pathology, literature data on the frequency and occurrence of endometritis in women with impaired reproductive function, as well as the peculiarities of the course of pregnancy in women who have had endometritis, are needed.

### MATERIALS AND METHODS OF RESEARCH:

Our study was conducted on the basis of the maternity hospital No. 8 and No. 9 of the city of Tashkent. The study involved 106 pregnant women. Group I (control) consisted of 30 pregnant women with an uncomplicated obstetric and gynecological history. Group II (main) consisted of 76 pregnant women with a history of endometritis who underwent

preconception training. Patients in the main group were selected based on inclusion and exclusion criteria. Criteria for inclusion in the main group:

- morphologically confirmed diagnosis of endometritis before the onset of this pregnancy;
- the woman's consent to the study.

Exclusion Criteria:

- severe extragenital diseases;
- acute infectious diseases during pregnancy. All women underwent general clinical, microbiological (bacterioscopic) and bacteriological examination of the contents of the vagina and cervical canal, bacteriological seeding for the microflora of cervical mucus, PCR diagnostics for Chlamidia trachomatis and Mucoplasma genitalium), ultrasound, Doppler study, extended colposcopy, morphological study of afterbirths. Statistical processing of the obtained data was performed in Microsoft Excel, Statistica 6.0.

### RESULTS AND ITS DISCUSSION:

All examined women were between the ages of 18 and 45. The mean age of patients in the control group was 25.2±4.8 years, in the main group - 28.8±5.1 years ( $p<0.05$ ). In terms of social status, there were significant differences between the groups only in the number of employees: in the main group - 45.44%, in the control group - 38.33%. When analyzing the parity in the compared groups, primigravidas were only in the control group (53.33%), and multi-pregnant primiparas were only in the main group (19.27%). The number of multiparous women significantly prevailed in the group of patients with a history of endometritis (60.73%) compared with the control group (16.67%). When analyzing the obstetric and gynecological history, it was found that timely delivery in history was



significantly more common in group I (53.98%) compared with group II (16.67%). Only women of the main group had a history of induced abortions (40.98%), spontaneous miscarriages (34.55%), premature births (6.67%), perinatal losses (5.72%), infertility (1.25%). When studying the gynecological history, it was revealed that inflammatory diseases of the lower reproductive tract in the anamnesis were significantly more common in patients of the main group (86.18%) compared with the control group (10.0%). Ectopia of the cervix in group II was also detected significantly more often (14.55%) than in group I (11.67%). The frequency of extragenital pathology in the compared groups did not differ significantly, with the exception of diseases of the circulatory organs (valvular defects, heart rhythm and conduction disorders, arterial hypertension), which were observed in group II at 16.42%, in the control group at 4.33%. As for urinary tract infections, they were recorded with almost the same frequency in the studied groups (in I - in 5.67%, in II - in 7.33%). Also, there were no significant differences between the groups examined in terms of the incidence of acute respiratory viral infections during pregnancy. Infectious diseases of the lower genitalia in the main group were detected in 47.78%, in the control group - in 10.0%. At the same time, the structure of infectious pathology was different in the I and II trimesters in the examined women. The most common infectious pathology in the main group of patients was cervicitis, which was significantly more frequently recorded both in the first and second trimesters with the same frequency (49.27%) compared with the control group (3.33%). In the group of women with a history of endometritis in the first trimester, vaginal dysbiosis was registered in 1.22% (in the control group - in 3.33%), bacterial vaginosis - in 4.32% (in the control group - in 1.67%), vaginitis - in 8.64% (in the control group - in 11.67%). In the group of women with a history of endometritis in the II trimester, vaginal dysbiosis was observed in 1.22% (in the control group in 1.67%), bacterial vaginosis in 4.88% (in the control group in 1.67%), vaginitis - in 28.86% (in the control group - in 5.0%). Thus, there were no significant differences between the groups in terms of the incidence of bacterial vaginosis and vaginal dysbiosis in the first and second trimesters. Vaginitis was significantly more often observed in the second trimester in patients of the main group compared to the control group, while 2 times more often than in the first trimester. Threatened miscarriage in the first trimester was observed only in the main group of women (8.94%). Pregnancy was significantly more complicated by the

threat of miscarriage in the second trimester in patients of the main group (18.45%) compared with the control group (10.0%). At the same time, a persistent threat of abortion occurred only in the group of women with a history of endometritis (19.11%). Moderate preeclampsia was observed in the main group in 4.47%, in the control group - in 1.67%. Severe preeclampsia was detected only in the group of women with a history of endometritis (2.03%). Mild anemia was recorded with the same frequency in both groups I and II (17.89 and 16.67%, respectively). Anemia of moderate degree was more often observed in the group of women with a history of endometritis in (7.3%) than in the control group in (1.67%). Inflammatory changes in the general blood test during this pregnancy (leukocytosis, stab shift of the leukocyte formula to the left), not associated with extragenital pathology, occurred only in the main group of women (16.67%). Chronic placental insufficiency was significantly more often diagnosed in the main group of women (25.2%) compared to the control group (5.0%). According to the Doppler examination of patients with impaired uteroplacental blood flow in group II, there were significantly more (21.54%) than in group I (3.33%). group of patients (6.67 and 1.11%, respectively). IA degree blood flow disorders were significantly more frequently recorded among pregnant women with a history of endometritis (17.07%) compared with the control group (3.33%) IB and II degree blood flow disorders occurred only in the main group of women (3.66 and 0.81 % respectively). FGR was also significantly more common in pregnant women with a history of endometritis (11.85%) compared with the control group (3.33%). At the same time, in the control group, only degree I FGR was observed in 3.33% of women, while in the main group - in 12.2% of women, degree II FGR - in 3.65%. According to the results of ultrasound polyhydramnios, oligohydramnios, hyperechoic coarse inclusions were found only in group II of women (14.89, 5.94 and 7.73%, respectively). Pregnancy outcomes in all patients were analyzed. Early and late miscarriages in pregnant women of both groups were not registered. Pregnancy ended in timely delivery in all patients of the control group and in 79.84% of women with a history of endometritis. Premature births occurred only in the group of women with a burdened history (10.16%), as well as 1 case of stillbirth (antenatal fetal death). Complications such as anomalies of labor activity, premature rupture of amniotic fluid at full term, deterioration of the fetus during childbirth were recorded with the same frequency in the main and control groups of women.



Among the complications of the III stage of labor, only in the II group there were violations of the separation of the placenta (3.66%). Severe asphyxia at birth was also recorded only in the group of women with a history of endometritis (7.72%). Such complications of the early neonatal period as respiratory distress syndrome, IUI of the newborn, occurred only in women with a history of endometritis (6.5 and 5.69%, respectively). Patients of the main group were diagnosed with intrauterine infection in 16.67% of cases. The reason for this was the combination of a complicated course of pregnancy (persistent threat of abortion in 62.68%, impaired uteroplacental blood flow according to Doppler in 43.33%, changes in the placenta and amniotic fluid according to ultrasound in 60%) with inflammatory changes in the general blood test. not associated with extragenital pathology. In the morphological study of the placenta in 100% there were inflammatory changes. These patients had adverse perinatal outcomes in 34.14%. Normal placenta, corresponding to the gestational age, was significantly more common in group I (56.67%) compared with group II (27.15%). Chronic placental insufficiency was verified morphologically in 15.2% of patients with a history of endometritis and in 3.33% of patients from the control group. Inflammatory changes in the placenta were observed significantly more often in the group with a history of endometritis (30.0%) than in the group control (13.33%), and always combined with placental insufficiency.

### **CONCLUSIONS:**

Thus, women with a history of endometritis, despite preconception preparation, constitute a high-risk group for the development of obstetric and perinatal complications. In women with a history of endometritis, significantly more often than in patients without a burdened history, during pregnancy, an infectious pathology of the lower reproductive tract (the most common form of which was an inflammatory process of the cervix), the threat of abortion, and chronic placental insufficiency were detected. Only in this group were stillbirths, IUI newborns, preterm births and severe birth asphyxia reported.

### **REFERENCE.**

1. Voropaeva E.E., Medvedev B.I., Kovalenko V.L., Kazachkov E.L., Kazachkova E.A. //Ural medical journal. 2009; 3(57): 21-25.
2. Dolgushina V.F., Nadvikova T.V., Troshina N.A., Letyagina N.P. Ural Medical Journal. 2014; 1(115): 56-59.

3. Radzinsky V.E., Dimitrova V.I. Mayskova I.Yu. Non-developing pregnancy. Moscow: GEOTAR-Media. 2009.
4. Sidelnikova V.M. Habitual pregnancy loss. M: Triad-X. 2005.
5. Agraval V., Hirsch E. Semin Fetal Neonatal Med. 2012; 17(1): 12-19 p.
6. Romero R., Espinoza J., Goncalves LF., Kusanovic JP., Friel L., Hassan S. Semin. Reprod. Med. 2007; 25: 21-39 p.
7. Sheinera E., Levy A. Eur. J. Obstet. Gynecol. Reprod. 2005; 118(10): 61-65 p.
8. Ugwumadu A. Gynecol. Obst
9. Chasen S. T., Kalish R. B., Kaufman J. et al. Obstetric outcomes after surgical abortion at > or = 20 weeks' gestation // Am.J. Obstet. Gynecol. 2005; 193(3): 1161-1164.
10. Chernesky M, Luinstra K, Sellors J, Schachter J, Moncada J, Caul O, Paul I, Mikaelian L, Teye B, Paavonen J, Mahony J. Can serology diagnose upper genital tract Chlamydia trachomatis infections. Studies on women with pelvic pain, with or without chlamydial plasmid DNA in endometrial biopsy tissue. //Sex Transm Dis. 2008 Jan; 25(1): 14-9.
11. Chronic endometritis is a frequent finding in women with recurrent implantation failure after in vitro fertilization / E. B. Jonson-Macananny [et al.] // Fertile&Sterile. 2010; 93: 437-44.
12. Creasy R.K.Gummner B.A.,Liggins G.C. Systems for predicting preterm birth //Obstet.Gynecol. 1980; 5(5): 692-695.
13. Eckert LO, Thwin SS, Hillier SL, Kiviat NB, Eschenbach DA. The antimicrobial treatment of subacute endometritis: a proof of concept study. //Am J Obstet Gynecol. 2004 Feb; 190 (2): 305-13.
14. Frey M.N., Ioppi A.E., Bonamigo R.R., Prado G.P. Streptococcus agalactie involved in the etiology of Sexually Transmitted Diseases // An. Bras. Dermatol. 2011; 86(6): 1205-1207.
15. Haggerty CL, Hillier SL, Bass DC, Ness RB; PID Evaluation and Clinical Health study investigators. Bacterial vaginosis and anaerobic bacteria are associated with endometritis. //Clin Infect Dis. 2004 Oct 1; 39(7): 900-4.
16. Haggerty CL, Hillier SL, Bass DC, Ness RB; PID Evaluation and Clinical Health study investigators. Bacterial vaginosis and anaerobic bacteria are associated with



- endometritis. //Clin Infect Dis. 2004 Oct 1; 39(7): 990-5.
14. Haggerty CL, Hillier SL, Bass DC, 2007, Andrist, L.C., Arias, R.D., Nucatola, D., 2009.
  15. Haller-Kikkatalo K. et al. Chronic endometritis is a frequent finding in women with recurrent implantation failure after in vitro fertilization, 2014 Jan; 25(1): 12-8.
  16. Helms D.J., Mosure D.J., Secor W.E., Workowski K.A. Management of trichomonas vaginalis in women with suspected metronidazole hypersensitivity // Am. J. Obstet. Gynecol. 2008; 198(4): 370.e1-7.11.
  17. Hillis SD, Joesoef R, Marchbanks PA, et al. Delayed care of pelvic inflammatory disease as a risk factor for impaired fertility. //Am J Obstet Gynecol 1993; 168: 1503-9.
  18. Hillier SL, Kiviat NB, Hawes SE, Hasselquist MB, Hanssen PW, Eschenbach DA, Holmes KK. Role of bacterial vaginosis-associated microorganisms in endometritis. //Am J Obstet Gynecol. 1996 Aug; 175(2): 435-41.
  19. Jauniaux E., Farquharson R. G., Christiansen O. B., Exalto N. Evidence-based guidelines for the investigation and medical treatment of recurrent miscarriage // Hum. Reprod. 2006. 21(9): 2216-2222.