



ECTOPIC PREGNANCY - A NEW LOOK AT THE PROBLEM

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Abstract:

Repeated ectopic pregnancy and fertility disorders in the future. According to one study, the incidence of pregnancy after conservative or surgical treatment of ectopic pregnancy was 80%, and the average time interval before conception was 9-12 months, and fertility after wait-and-see tactics and surgical treatment was the same. Ectopic pregnancy increases the risk of developing such a condition in the future by 7-13 times. This means that in 50-80% of cases, the next pregnancy will be uterine and in 10-25% – ectopic. All patients with ectopic pregnancy should be informed about the increased risk of its occurrence in the future.

Keywords: Ectopic pregnancy, hysteroscopy, trophoblast implantation, fallopian tubes.

INTRODUCTION. Ectopic pregnancy has been studied for several centuries, but its medical and social significance remains in the focus of modern healthcare. The reasons for the inextinguishable relevance of ectopic pregnancy are both the steady increase in the frequency of this formidable complication of pregnancy, and in direct correlation with maternal mortality [2,3,23,24]. The fatal outcome from ectopic pregnancy is due to hemorrhagic shock due to rupture of the placenta, which occurs, as a rule, in extra-tubular forms of ectopic trophoblast nidation, as well as its localization in the interstitial part of the fallopian tube [2,25,26,27]. Previously, numerous approaches to the diagnosis and treatment of ectopic pregnancy were proposed, various algorithms were developed and systematized aimed at optimizing the management tactics of patients with suspected ectopic trophoblast activation [1,4,8,9,10,11,21,22]. However, the emergence of new data and technologies necessitates the revision and/or improvement of a number of well-known provisions. In particular, this applies to some extratubular forms of ectopic pregnancy, especially cervical pregnancy and pregnancy in the uterine scar after cesarean section, as well as interstitial tubal pregnancy, organ-sparing treatment of which has been associated with operative hysteroscopy in recent years [2,5,12,13,14,15,16,17]. For many years, ectopic pregnancy has been one of the important problems of obstetrics and gynecology. Despite the progress made in the diagnosis of this pathology, its frequency has a steady upward trend worldwide, reaching 1.3-2.6% among all pregnancies [2,3,6,7,18,20]. In the structure of acute gynecological diseases, ectopic pregnancy consistently occupies the second place (Frolova O.G. et al., 2016). Each case of ectopic pregnancy poses not only a danger to a woman's health, but is also fraught with adverse long-term consequences. In 36-80% of women, ectopic trophoblast implantation leads to the development of secondary infertility, and the frequency

of repeated ectopic pregnancy reaches 20-30%. It should be noted that the mortality rate from ectopic pregnancy is relatively high, which is 5.8-8% among the causes of maternal mortality [2,3,6,9]. The fallopian tubes are the dominant area of ectopic attachment of the fetal egg, accounting for 97-98% of all cases of ectopic pregnancies [2,3,6,9]. At the same time, the most common is the location of ectopic pregnancy in the ampullary part of the fallopian tube (70%).

The frequency of other (rare) forms of ectopic pregnancy is distributed as follows: ovarian – 0.4-1.3%, cervical – 0.1-0.4%, abdominal – 0.1%, intraligamental – 0.1% [2,27]. With an increase in the frequency of cesarean section, the role of pregnancy in the uterine scar has increased – 6.1% of all women with ectopic pregnancy who had a history of abdominal delivery [2,3,28]. It is also possible to develop heterotopic pregnancy, the occurrence of which in the natural cycle does not exceed the ratio of 1:30,000 pregnancies, and with the use of assisted reproductive technologies reaches 1:500 pregnancies [2,3,6,9]. It is fair to note that today the transfer of two or more embryos in the IVF program is not recommended and is used extremely rarely.

There is also evidence in the literature on the role of vascular endothelial growth factor (VEGF) in the development of ectopic trophoblast formation. SAFR is a powerful angiogenic factor that acts as a modulator of vascular growth and permeability in the endometrium, decidual membrane and trophoblast. These processes are directly related to normal implantation and placentation.

A number of studies have established changes in the level of immunocompetent cells detected in decidual tissue during ectopic pregnancy. Thus, there is an increase in SBZ+, SB68+, the absence of SV56+, changes in the ratio of lymphocytes.

Matrix metalloproteinases (MMR) and their inhibitors (TIMP-1) play an important role in cytotrophoblastic



invasion. At the same time, the production of MMR is associated with the invasive activity of cytotrophoblast cells. Ectopic trophoblast activation correlates with changes in the expression of MMR types 1,2 and 9 [2,3,6,9].

An analysis of the literature data convinces us that there are currently no clear, well-founded diagnostic algorithms and therapeutic measures for suspected ectopic pregnancy of various localization. Of course, each form of ectopic pregnancy has not only its own etiopathogenetic and clinical features, but also individual approaches to diagnosis and treatment based on the use of modern high-tech methods. At the same time, their use should not be chaotic, but should constitute a rationally balanced system, the use of the principles of which will preserve the reproductive potential of a woman and minimize the frequency of possible complications..

PURPOSE. To improve and modify the known examination systems for patients with various forms of ectopic pregnancy, which will optimize the diagnosis of ectopic pregnancy and treatment tactics for these patients, taking into account the capabilities of modern medical technologies.

MATERIAL AND METHODS. In this research work, a pro- and retrospective study of over 400 medical histories of patients of reproductive age hospitalized at the S.S. Yudin State Clinical Hospital with suspected ectopic pregnancy of various localization was carried out. The age of the examined patients ranged from 17 to 43 years, averaging 25.72 ± 0.36 years.

RESULT. The analysis of menstrual function data revealed that 354 (88.5%) of the surveyed women had menarche at the age of 13-14 years. At the same time, the appearance of menstruation after 15-16 years was observed only in 16 (6.06) patients.

In 321 (80.25%) patients, the menstrual cycle was normalizing, amounting to 25-28 days. Only 39 (9.75%) women had a long menstrual cycle (more than 30 days), a cycle of less than 21 days was observed in 40 (10%) women. Menstrual bleeding within 3-5 days was observed in 87.75% of patients. Moderate menstruation was observed in 308 (77%) of the surveyed women, while 64 (16%) women reported heavy menstrual bleeding. In 89 (22.25%) patients, menstruation was painful, while 52 women noted soreness on the first day alone.

The majority of patients (78.25%) report the onset of sexual activity at the age of 17-25 years.

When studying reproductive function, it was found that 332 (83%) women had a history of one or more pregnancies, 17% of women did not have pregnancies. The average pregnancy rate among the patients was

2.37 ± 0.17 , and the average number of births was 1.06 ± 0.42 . Among all 39 pregnancies, only 12.87% of women had childbirth. Artificial termination of pregnancy was registered in 40.25% of women, of whom 23.75% did not give birth. 17.5% of the patients had spontaneous abortions at various periods. Ectopic pregnancy of various localization was observed in 58 patients prior to the present study. Tubal pregnancy has been recorded in the past in 56 women, 37 of whom underwent tubectomy, and 19 women had their fallopian tube preserved. At the same time, in the majority (85.7%) of these patients, subsequent ectopic pregnancy developed in the opposite fallopian tube, in 14.3% - in the same tube or in the stump of the tube. Cervical pregnancy was previously observed in 2 patients.

In the past, 28 women were diagnosed with infertility, the duration of which ranged from 2 to 10 years.

In order to prevent pregnancy, some (38.75%) of the patients used various methods of contraception. Among them, barrier methods were used by 13.5% of women, oral contraceptives – 10.05%, intrauterine contraception – 6%, interrupted sexual intercourse – 9.2%.

In the past, most of the examined patients had suffered from various gynecological diseases. Among which, pelvic inflammatory diseases were the most common, diagnosed in 46.5% of women, including in 13% of cases after termination of pregnancy. Acute inflammatory diseases of the pelvic organs (salpingoophoritis, endometritis) occurred in 27.5% of cases, chronic inflammatory processes were observed in 18.75% of cases. Cervical ectopia was diagnosed in 20.25% of the examined women, for which they had previously received cryo-, laser- or radio wave treatment. In the past, 78 (19.5%) patients underwent surgical treatment for cystic ovarian formations, tubal-peritoneal factor infertility and ectopic pregnancy.

The stages of operative hysteroscopy in CSP are in many ways similar to those in cervical pregnancy:

- 1) the instrument is accompanied by a constant supply of an irrigated dielectric solution, providing soft hydrodilatation and, accordingly, partial detachment of the elements of the fetal egg;
- 2) the "cold" loop of the resectoscope excises the tissues of the fetal egg until its "free" fragments are completely removed without damaging the chorial site – prevention of active bleeding from the bed of the ectopic trophoblast;
- 3) after the maximum release of the scar on the uterus, the destruction of the ectopic chorion is performed using a balloon electrode in the "cutting + coagulation" modes, as well as pure "coagulation";
- 4) at the final stage of the operation, a revision of the uterine cavity is performed, curettage of its walls in order to remove the decidual endometrium (Davydov



A.I. et al., 2019; Davydov A.I. and Strizhakov A.N., 2016) (Fig. 34-38).

In our studies, the duration of hysteroscopic surgery varied from 15 to 23 minutes, averaging 18.5±4.5 minutes. The indicators of the effectiveness of treatment in the immediate postoperative period were considered to be a decrease in serum HCG levels by 1.5 or more times 36 hours after

surgery, as well as the absence of structural changes in the uterine scar during transvaginal echography.

According to both serum HCG testing and ultrasound scanning results, ectopic trophoblast persistence was not recorded in any observation. Retrospectively, uterine pregnancy occurred in one patient, ended in fetal death at 14-15 weeks gestation, the rest of the women did not plan pregnancy and used estrogen-progestogenic drugs for contraception.

Analysis of the results of operative hysteroscopy showed that with CSP, the intrauterine method has both its advantages and limitations.

CONCLUSIONS. Interstitial (angular) pregnancy is the only form of tubal pregnancy when it is possible to apply surgical hysteroscopy as an independent treatment method, provided that the trophoblast is predominantly interstitial (the isthmus of the fallopian tube is not involved in the pathological process), as well as the absence of pronounced damage to the isthmus part.

LITERATURE

1. Asgharnia M. Evaluation of serum creatine phosphokinase in diagnosis of tubal ectopic pregnancy compared with intrauterine pregnancy and threatened abortion / M. Asgharnia, R. Faraji, F. Mirblouk, Z. Atrkar Roshan, A. Parvizi // Iranian Journal of Reproductive Medicine. – 2012. – Vol. 10, Iss. 4. – P. 303-306.
2. Berretta R. Tubal ectopic pregnancy: our experience from 2000 to 2013 / R. Berretta, A. Dall'Asta, C. Merisio, M. Monica, L. Lori, L. Galli, D. Mautone, T. Frusca // Acta Biomed. – 2015. – Vol. 86, Iss. 2. – P. 176-180.
3. Birge O. Medical management of an ovarian ectopic pregnancy: a case report / O. Birge, M.M. Erkan, E.G. Ozbey, D. Arslan // Journal of Medical Case Reports. – 2015. – N. 9. – P. 290.
4. Briggs B.N. A Hertzian contact mechanics based formulation to improve ultrasound elastography assessment of uterine cervical tissue stiffness / B.N. Briggs, M.E. Stender, P.M. Muljadi, M.A. Donnelly, V.D. Winn, V.L. Ferguson // Journal of biomechanics. – 2015. – Vol. 48, Iss. 9. – P. 1524-1532.
5. Хамдамов И.Б. Клиническая оценка эффективности традиционного подхода

лечения грыж передней брюшной стенки у женщин фертильного возраста // Вестник врача. – Самарканд 2022. № 2.2 (104). – С.65-70.

6. Khamdamov I.B., Khamdamov A.B. Differentiated approach to the choice of hernioplasty method in women of fertile age (Clinical and experimental study) // Тиббиётда янги кун. – Бухоро, 2021.-№ 6 (38/1).-С. 112-114.
7. 7.Хамдамов И.Б., Хамдамов А.Б. Фертил ёшдаги аёлларда эндовидеохирургик герниопластика // Тиббиётда янги кун. Бухоро, 2021.-№6 (38/1) -С. 25-27.
8. 8.Хамдамов И.Б. Experimental determination of the extensibility of the anterior abdominal wall tissues at different times of pregnancy using various approaches to hernioplasty// Academics: An International Multidisciplinary Research Journal Vol. 12, Issue 04, April 2022 SJIF 2022 = 8.252 P.193-201
9. 9.Хамдамов И.Б. Совершенствование тактических подходов в лечении грыж передней брюшной стенки у женщин фертильного возраста // Тиббиётда янги кун. Бухоро, 2022.-№10(48)- С. 338-342.
10. 10.Хамдамов И.Б. Морфофункциональные особенности брюшного пресса у женщин репродуктивного возраста // Тиббиётда янги кун. Бухоро, 2022.-№3(41)- С. 223-227.
11. 11.Khamdamova M.T. Ultrasound features of three-dimensional echography in assessing the condition of the endometrium and uterine cavity in women of the first period of middle age using intrauterine contraceptives // Biology va tibbiyot muammolari. - Samarkand, 2020. - No. 2 (118). - P.127-131.
12. Khamdamova M. T. Ultrasound assessment of changes in the endometrium of the uterus in women of the first and second period of middle age when using intrauterine and oral contraceptives // Биомедицина ва амалиёт журнали. – Ташкент, 2020. - №2. - 8 часть. - С.79-85.
13. 13.Khamdamova M. T. Anthropometric characteristics of the physical status of women in the first and second period of middle age // A new day in medicine. Tashkent, 2020. - № 1 (29). - С.98-100.
14. Khamdamova M.T. Age-related and individual variability of the shape and size of the uterus according to morphological and ultrasound studies // News of dermatovenereology and reproductive health. - Tashkent, 2020. - No. 1-2 (88-80). - P.49-52.



15. Khamdamova M. T. Anthropometric characteristics of the physical status of women in the first and second period of middle age // Тиббиётда янги кун. Ташкент, 2020. - № 1 (29). - С.98-100.
16. Хамдамова М.Т. Возрастная и индивидуальная изменчивость формы и размеров матки по данным морфологического и ультразвукового исследований // Новости дерматовенерологии и репродуктивного здоровья. - Ташкент, 2020. - № 1-2 (88-80). - С.49-52.
17. Хамдамова М.Т. Ультразвуковая особенности трехмерной эхографии в оценке состояния эндометрия и полости матки у женщин первого периода среднего возраста применяющие внутриматочные контрацептивные средства // Биология ва тиббиёт муаммолари. - Самарканд, 2020. - №2 (118). - С.127-131.
18. Khamdamova M. T. Ultrasound assessment of changes in the endometrium of the uterus in women of the first and second period of middle age when using intrauterine and oral contraceptives // Биомедицина ва амалиёт журнали. – Ташкент, 2020. - №2. - 8 часть. - С.79-85.
19. Хамдамова М.Т. Особенности ультразвуковых параметров матки у женщин первого и второго периода среднего возраста применяющие инъекционные контрацептивные средства // Тиббиётда янги кун. - Ташкент, 2020. - № 2/1 (29/1). - С.154-156.
20. Хамдамова М.Т. Особенности ультразвукового изображения матки и яичников у женщин второго периода среднего возраста применяющие комбинированные оральные контрацептивные средства // Тиббиётда янги кун. - Ташкент, 2020. - № 2 (30). - С. 258-261.
21. Хамдамова М.Т. Индивидуальная изменчивость матки и яичников у женщин применяющие и не использующие различные виды контрацептивные средства // Тиббиётда янги кун. - Ташкент, 2020. - № 3 (31). - С. 519-526.
22. Khamdamova M. T. Echographic features variability in the size and shape of the uterus and ovaries in women of the second period of adulthood using various contraceptives // Asian Journal of Multidimensional Research - 2020. – N9 (5). - P.259-263.
23. Khamdamova M. T. Somatometric characteristics of women of the first and second period of adulthood using different contraceptives with different body types // The american journal of medical sciences and pharmaceutical research - 2020. – N8 (2). - P.69-76.
24. Хамдамова М.Т., Жалолдинова М.М., Хамдамов И.Б. Состояние оксида азота в сыворотке крови у больных кожным лейшманиозом // Тиббиётда янги кун. - Бухоро, 2023. - № 5 (55). - С. 638-643.
25. Хамдамова М.Т., Жалолдинова М.М., Хамдамов И.Б. Значение церулоплазмينا и меди в сыворотки крови у женщин носящих медьсодержащих внутриматочной спирали // Тиббиётда янги кун. - Бухоро, 2023. - № 6 (56). - С. 2-7.
26. Khamdamova M. T. Bleeding when wearing intrauterine contraceptives and their relationship with the nitric oxide system // American journal of pediatric medicine and health sciences Volume 01, Issue 07, 2023 ISSN (E): 2993-2149. P.58-62
27. Khamdamova M. T. The state of local immunity in background diseases of the cervix // Eurasian journal of medical and natural sciences Innovative Academy Research Support Center. Volume 3 Issue 1, January 2023 ISSN 2181-287X P.171-175.
28. Хамдамова М.Т., Хасанова М.Т. Различные механизмы патогенез гиперплазии эндометрия у женщин постменопаузального периода (обзор литературы) // Тиббиётда янги кун. - Бухоро, 2023. - № 8 (58). - С. 103-107.