



Etiopathogenesis Of Tubal Pregnancy and Its Impact on Women's Reproductive Health

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ABSTRACT

Despite significant progress in the development and improvement of methods of treatment of ectopic pregnancy, the problem of further rehabilitation of reproductive function remains extremely relevant and requires further study. The issues of etiology, pathogenesis, diagnosis and treatment of ectopic pregnancy have been studied in sufficient detail. Nevertheless, a number of issues remain unresolved.

Keywords:

Ectopic pregnancy, hysteroscopy, trophoblast implantation, fallopian tubes

Introduction. Ectopic pregnancy was first described in the XVII century, but the diagnosis was established only after the death of the patient. The case of the vital diagnosis of ectopic pregnancy was recorded in 1812. Until 1870, only 500 cases of ectopic pregnancy were described in the world literature, and the treatment methods used did not give a positive result [15, 27]. At the beginning of the 19th century, the survival rate in ectopic pregnancy remained very low: out of 30 operated patients, only five survived. The survival rate of patients without surgery was 1:3 [15]. In the last quarter of the 19th century, serious research on this problem began, including in Russia. Zmigrodsky V.I. described 500 cases of ectopic pregnancy in ten years – since 1876. In 1886, in 1882, Phenomenov N.N. wrote a work on indications for glandular section in ectopic pregnancy. Supporters of the surgical treatment of this pathology were Snegirev V.F. and his students, but at that time the mortality rate was still very high [27]. In the first half of the 20th century, deaths from ectopic pregnancy remained high – 200_400 per 10,000 patients [15]. Mortality

from ectopic pregnancy remains high in the 21st century, occupying the second place in the structure of maternal mortality in the world, the third fourth in industrialized countries of the world and the 5th in the Russian Federation [2,3,23,24]. In 2012, the maternal mortality rate from ectopic pregnancy in Russia was 0.47, in 2013 – 0.21, in 2014 – 0.26 per 100,000 live births [4,7]. In the USA, maternal mortality from this disease is 4-6% and is the most common cause of death in the first trimester of pregnancy [19]. To date, ectopic pregnancy occupies the 2nd place in the structure of acute gynecological diseases and the first among nosological forms accompanied by intra-abdominal bleeding [2,25,26,27]. Despite significant advances in the diagnosis and treatment of gynecological diseases, the problem of ectopic pregnancy remains relevant. Ectopic pregnancy occupies one of the leading places in the structure of maternal mortality, is in the first place as a cause of intra-abdominal bleeding and in the second place in the structure of acute gynecological diseases. At least half of emergency surgical interventions in gynecological practice are

performed by operations related to an interrupted ectopic pregnancy. Despite the progress made in the diagnosis and surgical treatment of ectopic pregnancy, it is not possible to achieve a reduction in the frequency of this pathology and related complications. In the structure of genital cavity surgeries, ectopic pregnancy occupies from 8.8% to 55% in gynecological hospitals of various profiles [29, 44]. Among urgent gynecological operations, surgical interventions for ectopic pregnancy occupy one of the first places and account for about 50% [2,3,6,7,18,20]. Ectopic pregnancy is one of the most common causes of infertility. Ectopic pregnancy does not belong to the considered reproductive losses, however, to date it continues to be one of the main problems of reproductology related to the subsequent fertility of a woman. After an ectopic pregnancy, many develop an adhesive process in the pelvis, 60_80% of patients have infertility, 20_30% of patients have repeated ectopic pregnancy [1,4,8,9,10,11,21,22]. In recent years, there has been a tendency to increase the frequency of ectopic pregnancy [2,5,12,13,14,15,16,17].

Purpose. The purpose of the study: to analyze domestic and foreign specialized literature; to assess the causes of reproductive dysfunction of women after ectopic pregnancy; to outline ways of their rehabilitation.

Materials And Methods. The modern specialized literature on etiopathogenesis, clinic and various methods of treatment of women with ectopic pregnancy has been studied. Special attention is paid to the violation of the reproductive function of women after treatment and their rehabilitation.

Result. Tubectomy surgery is the main method of treatment for tubal pregnancy and accounts for 10-27% of all gynecological operations. After performing radical surgery, the infertility rate is 70-80% of patients, and in 2-22% it leads to repeated ectopic pregnancy. In 42-49% of cases, menstrual function is impaired, cystic degeneration of the ovaries develops, psychological status is impaired, and performance is restored only in 81.6-85.8% of

patients, which is due to the lack of identification of the cause of ectopic pregnancy and, as a result, etiological therapy [1,6]. That is why, rehabilitation measures that are used after surgical treatment are associated with the further quality of life of a woman and the restoration of her reproductive function. To obtain a positive effect from rehabilitation measures, it is necessary to adhere to the basic principles of rehabilitation therapy [12]: 1) the inseparable connection of therapeutic and rehabilitation measures; 2) early, from the first days of the disease, the beginning of rehabilitation; 3) continuous phased rehabilitation, its complexity; 4) individualization of the rehabilitation program, taking into account the influence of the clinical features of the disease, the patient's reaction to these measures; 5) careful medical supervision.

Early diagnosis and timely surgical treatment of ectopic pregnancy can reduce mortality, the frequency of postoperative complications, and preserve a woman's reproductive function. Success in maintaining this function depends on many factors. The type and volume of surgical intervention, the elimination of psychological and surgical injuries, the disappearance of morphological and functional changes in the fallopian tubes, the restoration of normal interaction of the vascular, nervous and endocrine systems of the body are important [2,8].

It is important that the methods of treatment of ectopic pregnancy require constant study and improvement. Among the consequences of traditional treatment, a pronounced adhesive process of the pelvic organs, secondary infertility, and an increased risk of repeated ectopic pregnancy should be highlighted.

Currently, surgical treatment is generally accepted, while endosurgery and minimally invasive technologies are of the greatest interest. Among the advantages of laparoscopic technologies, it is necessary to highlight the minimality of surgical trauma, postoperative intestinal paresis, purulent-inflammatory processes, reduction in the use of analgesics, and cosmetic effect. In comparison with laparotomy access, recovery of working

capacity does not occur after 21-30 days, but on 7-9 days. Analysis of data on long-term consequences showed that the patency rate of the remaining pipe is 86% [5,11,18]. The adhesive process in the postlaparoscopic period develops 2.6 times less frequently than after laparotomy [19]. The use of minimally invasive technologies has made it possible to develop and improve a number of reconstructive plastic surgeries to restore the fertile function of patients.

A number of publications have proved the relationship between the restoration of reproductive function and the condition of the contralateral tube. It is this indicator that is crucial in restoring the fertility of women who have undergone ectopic pregnancy.

The relationship between the start time of rehabilitation measures and their effectiveness has been proven. Thus, the restoration of reproductive function occurs 2 times more often in patients who started rehabilitation immediately after surgery, repeated ectopic pregnancy also develops 2 times less often compared to those who began rehabilitation measures 3-6 months after surgery [4,13].

Intraoperative measures aimed at preventing the adhesive process and improving the condition of the contralateral tube are more effective. There is no longer any doubt about the need to preserve the fallopian tubes with the phenomena of chronic salpingitis, since morphological changes in it, as a rule, are reversible [7].

A technique was proposed for injecting 100-150 ml of 0.25-0.5% novocaine solution with antibiotics into the abdominal cavity in order to improve the course of the postoperative period, as well as the introduction of antibiotics and hormonal drugs into the tube affected by the inflammatory process [22]. The successful application of retrograde hydrotubation is described, which makes it possible to exclude sharp stretching of the fallopian tube and traumatization of the mucous membrane. For the purpose of hydrotubation in the early postoperative period, it was recommended to insert a plastic

catheter into the lumen of the fallopian tube [16].

A technique of artificial hydroperitoneum was also proposed by introducing dextrans and glucocorticoids into the abdominal cavity to prevent the development of adhesions [9]. Adequate restoration of blood loss is considered to be the prevention of the development of neuroendocrine disorders, which contributes to the most complete rehabilitation of patients. The use of antibacterial therapy is advisable within 10 days of the postoperative period. However, there are no recommendations regarding the type of antibacterial therapy depending on the flora isolated from the affected tubes [23,24].

К способам профилактики формирования спаечного процесса органов малого таза относят: снижение травматичности операции, ликвидацию инфекционного возбудителя, своевременное восстановление перистальтики в послеоперационном периоде, снижение общей алергизации организма, применение медикаментозных препаратов, препятствующих формированию спаек. Применение протеолитических ферментов зарекомендовало себя как эффективный метод борьбы с формированием спаечного процесса [14].

Hydrotubation courses were used to promote mechanical stretching of the tube and irritation of its receptor apparatus, allowing topical application of drugs with anti-inflammatory effect. At the same time, the optimal time for starting a course of hydrotubation was considered to be 8-12 days of the postoperative period [10,25]. Comprehensive anti-inflammatory treatment of patients after surgical treatment of tubal pregnancy leads to the most complete restoration of the anatomy and functional activity of the fallopian tubes.

Physiotherapy is a separate area of rehabilitation. The leading conditions of postoperative physiotherapy are: early initiation of treatment (the first 6-12 hours) after surgery, since it is during these periods

that fibrinous adhesive processes begin to form in the pelvic cavity; the use of techniques providing for the possibility of intravaginal exposure (low-intensity laser radiation is stronger – destroy them. The components of antihomotoxic drugs relate mainly to weak and medium irritants and, accordingly, stimulate and support the processes of vital activity in cells, organ tissues and in the body as a whole, while they do not have toxic and side effects on the body. After completing the rehabilitation courses, women were re-examined to assess the effectiveness of the measures taken and the possibility of resolving the next pregnancy. Carrying out long-term individual rehabilitation measures in women with a history of ectopic pregnancy allowed almost all patients to ensure a normal ovulatory menstrual cycle and normalize reproductive function in the future. In the case of pregnancy, almost all of them were uterine [17,22].

In order to prevent infertility and repeated ectopic pregnancy due to neuroendocrine disorders, it is necessary to highlight the role of hormone therapy in the postoperative period, which, unfortunately, is not given enough attention in domestic and foreign literature. In cases of prescription of hormonal drugs, the initial hormonal status of a woman is rarely taken into account. One of the variants of hormonal function disorder is the inferiority of the luteal

phase. In this situation, the scheme of using synthetic progestogens for 3-6 months has proven itself well [11].

During the entire rehabilitation period and 2-3 months after it, patients should take contraceptive drugs. Only after assessing the anatomical and functional state of the reproductive apparatus, it is possible to cancel contraceptives and plan pregnancy [14].

Conclusions. Despite significant progress in the development and improvement of methods of treatment of ectopic pregnancy, the problem of further rehabilitation of reproductive function remains extremely relevant and requires further study. The issues of etiology, pathogenesis, diagnosis and treatment of ectopic pregnancy have been studied in

sufficient detail. Nevertheless, a number of issues remain unresolved. There is currently no rational strategy for early restorative treatment of reproductive system function. Medical science and practice should focus their efforts on finding the best ways to solve this problem.

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