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CHARACTERISTICS OF UNDEVELOPED PREGNANCY

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Abstract
For follow-up, 42 women with underdeveloped fetuses were observed, and their medical history, placental histological examinations and blood tests were studied Among the various forms of pregnancy termination, a special place is occupied by missed abortion, which occurs during the first trimester and is characterized by a prolonged retention of the fetus in the uterine cavity. This pathology has a separate code in the 10th edition of the International Statistical Classification of Diseases (1995). The problem of missed pregnancy is not only clinically relevant, but also socially relevant, since this pathology is very common (10-20%) in the composition of reproductive losses. The retention of a dead fetus in the uterine cavity poses a serious threat not only to the health of the woman, but also to her life.

Keywords: Antiphospholipid syndrome, missed pregnancy, colpitis, infertility, prostaglandins, misoprostol, anembryonia, polycystic ovary syndrome.

Introduction

Despite the great achievements in antenatal fetal protection, in some cases, intrauterine fetal death may occur under the influence of various adverse factors. The main causes of non-developmental pregnancy are the late reproductive age of the mother, multiple abortions in previous pregnancies, hormonal disorders, unhealthy lifestyle, mutational changes in fetal development, anembryonia, chronic diseases of the mother (gynecological and extragenital diseases), including TORCH infections, uterine wall anomalies, polycystic ovary syndrome, decompensated diabetes mellitus, arterial hypertension, systemic lupus erythematosus, and autoimmune diseases such as antiphospholipid

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syndrome. Many issues related to the pathogenesis of non-developmental pregnancy are still being discussed. In particular, the causes of fetal retention in the uterine cavity after its death and the factors causing pathological inertness of the uterus have not been sufficiently studied.

The purpose of the study:

To study the causes of undeveloped pregnancy and conduct a comparative analysis of methods for its termination.

Within the framework of the study, 42 women aged 19 to 37 years were examined. Of these women, 30 were in their first, 8 in their second, and 4 in their third pregnancy. The gestational age ranged from 5 to 12 weeks. Extragenital diseases were detected in 29 women, including chronic tonsillitis (10), anemia (18), chronic cholecystitis (12), and diffuse thyroid enlargement (1). Among extragenital diseases, 6 patients had grade 2 arterial hypertension, 10 had acute respiratory viral infection (ARVI) during pregnancy, and 8 had inflammatory diseases of the genitals. Also, 18 patients were diagnosed with colpitis, and 6 with primary infertility, which was observed for 4-5 years.

All patients (and their spouses) were examined for the presence of TORCH infections by polymerase chain reaction (PCR) and immunoenzyme assay (IFA) upon admission to the clinic. In addition, the blood coagulation system (AFS), coagulogram, biochemical studies, general blood and urine tests, blood group and analysis of secretions were performed.

The methods chosen for termination of pregnancy were medical abortion using synthetic prostaglandin E 1 - misoprostol and vacuum aspiration.

The results of the study showed that the most informative method for diagnosing an undeveloped pregnancy is ultrasound examination (UTT). It allows you to detect an undeveloped pregnancy long before the appearance of clinical symptoms, thereby helping to take the necessary measures in a timely manner.

Results and Discussion:

The most common causes of ectopic pregnancy include endocrine disorders, inflammatory diseases of the genital organs, changes in the mother's immune

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system, persistent endometritis, and chromosomal abnormalities. However, in 26-27% of cases, it is not possible to determine the exact cause of ectopic pregnancy. The causes of fetal retention in the uterine cavity after its death and the factors that cause pathological inertness of the uterus have not yet been fully studied.

Prolonged retention of the fetal membranes in the uterus leads to significant changes in all major indicators of the blood coagulation system. One of the main causes of perinatal morbidity and mortality is intrauterine infection. The causative agents of intrauterine infection can be more than 27 types of bacteria, viruses, parasites, 6 types of fungi, 4 types of simple protozoa, and rickettsia.

TORCH infections are a term used to describe a group of intrauterine infections that affect the central nervous system of the fetus, including toxoplasmosis (Toxoplasmosis), other infections (Other), measles (Rubella), cytomegalovirus (Cytomegalia), and herpes simplex virus (Herpes simplex). Timely detection of these pathologies is of great importance in reducing the level of prenatal diseases. All women participating in the study underwent UTT. According to the results of the examination for TORCH infections, only one pathogen was detected - chlamydia - in 7 patients, while in the remaining patients the infection was mixed, and the most common combinations were viral-bacterial infections. Among them, such variants as herpes simplex virus + cytomegalovirus + chlamydia, herpes simplex virus + ureaplasma, chlamydia + ureaplasma + candida were observed.

Analysis of hemostasis indicators showed that in patients with an undeveloped pregnancy, the following changes were observed: a decrease in the level and activity of the natural anticoagulant - antithrombin (AT-3), a slight increase in the level of fibrinogen, an increase in the concentration of soluble monomer-fibrin complexes (RKMF) and fibrin-fibrinogen complex breakdown products (PDFF). At the same time, the activated partial thromboplastin time (APTT) did not change significantly compared to the norm.

Currently, methods for terminating an undeveloped pregnancy are divided into two large groups: surgical methods (curettage or vacuum aspiration) and medical methods (treatment with various drugs that stimulate uterine contraction activity). Many scientific publications emphasize the risk of water intoxication, which is mainly associated with the use of high doses of oxytocin and the administration

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of large volumes of fluids without electrolytes.

Some methods of termination of pregnancy, such as dilation of the cervical canal, can lead to cervical laceration, perforation, or the development of ascending infection.

According to scientific research and statistics of the Ministry of Health of the Republic of Uzbekistan, 60-70% of women of childbearing age have extragenital diseases or are carriers of infections. Therefore, methods of termination of pregnancy that are gentle on the uterus and the body are of great importance for such women. One of the important achievements in this regard was the creation of analogues of natural prostaglandins. They have a stronger effect than their natural forms and act for a longer period.

Currently, one of the most gentle methods of termination of pregnancy is medical abortion using synthetic prostaglandins. This method can be used both in the early and late stages of pregnancy. Scientific information about prostaglandins was first provided in 1936 by Nobel Prize laureate von Euler.

Endogenous prostaglandins play an important role in many reproductive processes in the body, while exogenous (external) prostaglandins, under certain conditions, help to shorten the life cycle of the corpus luteum, stimulate the uterus, and terminate pregnancy.

Prostaglandins do not accumulate in tissues and have a very short life cycle. Their biological effects occur in three main directions:

1. They affect the cells in which they are produced.
2. They affect surrounding cells.

Prostaglandins can also affect tissues located far from the site of their biosynthesis in the body. It is known that hormonal regulation in the body occurs with the participation of cyclic adenosine-3,5-monophosphate (cAMP). Therefore, prostaglandins can affect the biosynthesis of cAMP and enhance or weaken the effect of hormones on cells. At the same time, prostaglandins do not belong to the category of true hormones, since they are not produced by the endocrine glands.

Synthetic prostaglandins stimulate the synthesis of their own prostaglandins in the body, therefore their effect is considered physiological and safe.

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Misoprostol (Cytotec) is an analogue of prostaglandin E 1, which, when taken orally at a dose of 200-600 mcg, causes regular uterine contractions. It has a relatively weak effect on the gastrointestinal tract and is widely used for the prevention of peptic ulcers, especially in patients treated with nonsteroidal anti-inflammatory drugs. Misoprostol helps to soften and dilate the cervix, and also protects the mucous membrane by reducing the production of gastric acid.

The mechanism of action of Misoprostol is as follows:

Ischemia of the placental area (impaired blood supply);

Damage to embryonic blood vessels;

Termination of pregnancy up to 24 weeks;

Treatment of uterine atony;

Cervical ripening in preparation for surgical abortion.

In our clinic, all patients were prescribed the following infusion procedures with prostaglandin to prevent coagulopathic bleeding:

The following procedures were used in patients: 10% - 10 ml of calcium chloride solution was administered intravenously, vitamin B group, antibacterial therapy, low-molecular anticoagulant - Enoxiparin sodium (at a dose of 0.4 ml) was administered. Enoxiparin increases the biological activity of the natural inhibitor AT3 (antithrombin 3). With its participation, the thrombin-fibrinogen reaction leads to the formation of a fibrin clot with an altered structure, which facilitates the subsequent fibrinolysis (clot dissolution) process.

Misoprostol was used to terminate pregnancy in the 1st trimester according to the following scheme: Misoprostol 200 mcg (1 tablet) sublingually every 2 hours 3 times, a total of 600 mcg (3 tablets). If spontaneous abortion did not occur completely, manual vacuum aspiration was additionally performed. In the post-abortion period, antibacterial therapy was continued, if necessary, drugs that stimulate uterine contractions (Oxytocin, Misoprostol) were used, and vitamin therapy was performed.

All patients were discharged from the hospital within 2-3 days. All of them were recommended to return after a month and undergo the following examinations: re-analysis for TORCH infection and diagnosis of antiphospholipid syndrome (APS).

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Conclusion

The results of the study showed that in undeveloped pregnancy, along with a decrease in uterine tone, disorders in the hemostasis system also play an important role. Therefore, the correct therapy and the use of a safe abortion method are important. Termination of pregnancy with synthetic misoprostol is currently considered the most effective method, as it reduces the risk of uterine bleeding and prevents the development of inflammatory processes.

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