

Eurasian Medical
Research Periodical



Choice of contraceptive method after surgical artificial abortion and evaluation of their effectiveness (Literature Review)

Hamrayeva Madina

3- course Master of the Department of Obstetrics and Gynecology, Tashkent Medical Academy

Abdullaeva L.M.

Doctor of Medical Sciences, Associate Professor, Department of Obstetrics and Gynecology, Tashkent Medical Academy

ABSTRACT

Relevance. Abortion is one of the frequent causes of gynecologic diseases and impaired fertility. More than 10-15%, and according to G.P. Parafeinik et al. and I.B. Frolov (2008), 21.7% of women after abortion have gynecological diseases, almost half of the women who underwent this operation, aggravated chronic inflammatory processes of the genital sphere. The greatest danger is undoubtedly an infected abortion. If the infection spreads, salpingoophoritis may develop, the frequency of which, according to various authors, ranges from 3.5 to 5.7%, metoendometritis - 1.7-3%, parametritis - 1.34%, as well as metritis, pelvic peritonitis, thrombophle- uterine venous thrombophlebitis and many other post-abortion infectious diseases. In addition, fetal egg retention (1.27-5.7%), ICH (0.13%), menstrual irregularities (11.4%) and other pathologies are common complications. According to Schulze and Herold (2008), endometritis complicated the course of the post-abortion period in 1.58% of women. A study of the long-term consequences of induced abortion revealed its negative impact on fertility. The study of the long-term consequences of induced abortion revealed its negative impact on fertility: the possibility of secondary infertility, tubal pregnancy, spontaneous abortions, and habitual pregnancy failure.

Keywords:

Endometritis,infertility,abort,contraceptive methods,parametritis

The aim of the present study is to compare and determine the efficacy and safety of different contraceptive methods in women who have undergone surgical artificial abortion.

Material and methods: Russian and English scientific literature sources were analyzed.

Result: Combined oral contraceptives are the best method of contraception after abortion, because in addition to high contraceptive efficacy these drugs have a number of therapeutic properties: they regulate the menstrual cycle, reduce the intensity and duration of menstrual bleeding, contribute to

the prevention of endometriosis and inflammatory diseases of the genital organs.

According to WHO, more than 60 million women currently use various types of intrauterine devices (IUDs), which are second only to oral hormonal contraceptives in popularity. In Russia, according to statistical data, this method of contraception ranks first in popularity (according to the Ministry of Health of the Russian Federation, in 2007. 14.56% of women of reproductive age used various types

of IUDs). IUDs currently in use are divided into two groups:

1 - non-medicamentous (inert, or neutral), manufactured made of polyethylene with the addition of barium sulfate;

2 - medical, containing copper or gestagens.

However, the use of intrauterine devices after abortion is associated with a risk of adverse reactions and complications. The use of intrauterine devices after abortion is associated with a higher risk of adverse reactions and complications than with conventional IUD use. These complications include pain syndrome, expulsions, pelvic inflammatory disease, menstrual irregularities, and uterine perforation.

Acceptability criteria for the use of effective contraceptive methods in the post-abortion period [1]. Any condition affecting contraceptive choice can be categorized into one of four categories.

Category 1 - conditions for which there is no restriction on method use (the method can be used without restriction).

Category 2 - conditions in which the benefits of using the method usually exceed the theoretical or proven risk (the method can be used most of the time).

Category 3 - conditions in which the theoretical or proven risk usually exceeds the benefits of using the method is not recommended unless a more appropriate method is not available or is not acceptable).

Category 4 - conditions that pose an unacceptably high risk to the patient using the method (the method should not be used).

For women who have undergone an abortion procedure, the options for effective reversible contraceptive methods are defined in Table 1. For women who have had an abortion, the options for effective reversible contraceptive methods are summarized in Table 1. Pills should preferably be started on the day of the abortion, after the operation is completed. The effectiveness of this method depends on the regularity and consistency of administration. During the first year of taking hormonal contraceptives the Pearl index is very low, i.e. the method has almost 100% efficacy.

Combined estrogen-gestagen oral contraceptives (OCs) differ in composition and regimen. The estrogenic component of modern OCs is usually represented by ethinylestradiol in a dose not exceeding 35 mcg. These drugs (commercial names) are: Marvelon, Mercilon, Tri-merci, Triquilar regulon, Novinet, Lindinet, Femoden, Logest, Diane-35, Janine, Yarina, Sylest, Belara, Jes.

Intrauterine contraception (IUCD) is one of the most widely- Intrauterine contraception (IUD) is one of the most widely used and effective methods of preventing unwanted pregnancies.

The insertion of an intrauterine contraceptive (in some countries and in our country) is carried out immediately after a pregnancy.

IUD insertion (in some countries and in our country) is performed immediately after abortion in the first trimester of pregnancy, if there is no infection of the uterus. When inserting the IUD after abortion, special care is needed to avoid perforation of the uterus, so the IUD should be inserted by an experienced specialist in compliance with all recommendations.

In a study by P. Fylling and F. Lerve 2005, a correlation was found between the type of contraception and IUD insertion. Correlation between the type of contraception and the age of women, number of births and the number of abortions. IUDs are recommended mainly for women who have given birth. For unmarried young women who prefer IUDs, IUD use is possible only if contraception is necessary for at least 1-2 months, with one sexual partner. There is still no consensus on the timing of IUD insertion-immediately at the end of abortion or long after surgery. Some authors recommend that the contraceptive be inserted into the uterine cavity immediately after an uncomplicated abortion [3].

It is believed that IUD insertion immediately after an abortion performed before 6-7 weeks of gestation is not recommended. However, if the abortion is performed later, the risk of genital inflammatory disease increases significantly.

In our opinion, it is better to insert the intrauterine contraceptive 4-6 weeks after the abortion (after the abortion has been performed). However, although oral

contraceptives (OCs) have improved significantly over the past decades, they have a number of disadvantages. Because OCs are metabolized in the gastrointestinal tract and undergo a primary hepatic transit effect, their efficacy may be reduced in vomiting and other digestive disorders, when taken concomitantly with other drugs, or when combined with certain foods. In addition, combined OCs must be taken daily, preferably at the same time, while the level of steroid hormones in the blood varies throughout the day, and the erratic level in the plasma may contribute to the occurrence of appropriate adverse reactions. A fair amount of work has demonstrated the efficacy of hormonal contraceptives as a means of prevention and treatment of complications of abortion. The use of OCs contributes to a faster recovery of the menstrual cycle. In addition, against the background of a regular menstrual cycle, the volume and duration of menstrual bleeding decreases. About 90% of women taking OCs have a regular cycle and less blood loss during menstruation (on average - by 50%). This reduces the risk of iron deficiency anemia. This aspect of OC use is very important nowadays, especially in women resorting to repeat or immediate postpartum abortions. Numerous studies have also confirmed the positive effects of OCs on a woman's brain function and emotional well-being. OCs on brain function and a woman's emotional state, improving memory and mood. It was found that the estrogenic component of the drugs reduces the concentration of monoamine oxidase, which contributes to an increase in serotonin levels, increases brain excitability and thus contributes to improved mood. Long-term use of OCs without interruption leads to a more pronounced positive result, which is important in the process of rehabilitation of women after abortion. Prescribing OCs immediately after medical or surgical abortion is clinically justified, as demonstrated in a systematic review and meta-analysis by Y. Che et al [4]. They analyzed data from 10 studies involving 1712 patients (895 control group patients and 817 women in the main group), who were prescribed OCs immediately after medical abortion, and 31 studies involving 8788

patients (4236 control women, 4552 main group patients) prescribed OCs immediately after medical abortion, and 31 studies involving 8788 patients (4236 control women, 4552 main group patients) prescribed OCs immediately after medical abortion. In the control group, 31 studies involving 8788 patients (4236 control women, 4552 main group) who received OCs immediately after surgical abortion. The duration of bleeding after abortion decreased in the OC group compared to the control group: on average by 3 days less with medical abortion and by 2.5 days with surgical abortion; the volume of blood loss decreased: on average less by 18 ml with medical abortion and by 11.5 ml with surgical abortion; faster recovery of menstrual function: by 8 days with medical abortion and by 8.5 days with surgical abortion; faster recovery of endometrial thickness: after 2 weeks it became larger by 0.76 mm, after 3 weeks - by 2 mm in the patients of the main group.

Statistically significant differences were found in the reduction of the incidence of complications after abortion in the main and control groups (without prescription of OCs). Thus, the incidence of unplanned pregnancy was 91% lower ($p < 0.00001$), pelvic infections - 82% lower ($p < 0.00001$), intrauterine synechiae - by 80% ($p < 0.00001$), incomplete abortions - by 75% ($p = 0.04$) [18]. Thus, the prescription of OCs immediately after medical or surgical abortion is clinically justified, and the choice of a reliable contraceptive becomes an important task for the obstetrician-gynecologist.

One of the preparations that can be prescribed to a patient for contraceptive purposes is an OC containing ethinylestradiol 30 mcg, drospirenone 3 mg and calcium levomefolate (metafolin) 451 mcg, which corresponds to 400 mcg of folic acid (Yarina Plus).

The presence of an additionally active form of folic acid (metafolin) can be considered as an advantage, given the research data that 90% of women of reproductive age have folate deficiency status [5]. According to the data of the Institute of Demography of the Higher School of Economics, in Russia the maximum number of abortions falls on the age of 25-29 years old.

At this age, most women have not yet fulfilled their reproductive plans, and it is likely that a woman may later decide to have children. Therefore, in addition to the presence of 30 mcg of ethinylestradiol, the presence of folate in the preparation may be beneficial for her subsequent, already desired, pregnancy.

It is well known that adequate folic acid intake during pregnancy planning is necessary to prevent congenital malformations in the fetus, and in countries where there is no practice of enriching flour with folic acid at the legislative level, the risk of giving birth to a child with a neural tube defect is still very high [6].

From this point of view, folate supplementation in OCs is the optimal way to deliver folate to the woman's body and allows women to maintain its sufficient level in the blood, especially in case of pregnancy soon after contraceptive withdrawal [7]. According to M. Cronin et al., 21% of the study participants (total 2064) became pregnant 1 month after discontinuation of contraceptives and 46% of women - within 3 cycles after discontinuation of OCs [8]. The results of a study published in 2020 demonstrated that after discontinuation of OCs, even with long-term use (8 years on average), ovarian reserve indicators (antimüllerian hormone level and number of antral follicles) returned to normal values after 2 months [9]. This means that if pregnancy after stopping OCs with this means that if the pregnancy after stopping folate OCs comes quickly, the blood folate level will be.

In 2015, a working group of the International Federation of Obstetricians and Gynecologists (FIGO) published an informational letter expanding the value of folate intake in the pregravidar period and during pregnancy. It is noted that the intake of this substance in a dose of 400 mcg in the periods before and after conception reduces the risk of congenital heart defects, birth of children with low birth weight, pre-term labor and autism. The authors claim that the use of this vitamin supplement at a dose of 400 µg is possible for years without any established side effects, even in countries with mandatory food fortification [36]. According to Russian clinical protocols for the management of patients after early miscarriage, a folic acid

dose of 400 mcg is adequate to prevent neural tube defects and other fetal malformations that often lead to early spontaneous abortions [10]. Some women insist on having another pregnancy as soon as possible after a miscarriage, but they often require follow-up examinations and pregravidar preparation (3 to 6 months). According to the National Clinical Guidelines for Rehabilitation after Early Miscarriage, the next pregnancy is recommended not earlier than 3 months, so reliable contraception is also crucial for this category of patients [11].

Thus, OC with ethinylestradiol 30 µg, drospirenone 3 mg and metafolate 451 µg may be an optimal choice for contraception after induced abortion or miscarriage. Folate in OCs may be an added benefit in restoring a woman's physical and psycho-emotional well-being. The favorable efficacy and safety profile of OCs with drospirenone allow a woman to be confident in the reliability of contraception, and the predictability of menstrual bleeding, low frequency of ointment discharge increase the compliance of intake.

Literature

1. Пестрикова Т.Ю., Юрасова И.А., Юрасов И.В., Шматкова А.С. Тенденции репродуктивного поведения молодежи в реалиях современной демографической ситуации. Репродуктивное здоровье детей и подростков. 2019;15(3):89-98.
2. UK Department of Health and Social Care. Decision: temporary approval of home use for both stages of early medical abortion. 2020. Accessed July 20, 2020.
3. Church K, Gassner J, Elliott M. Reproductive health under COVID-19 — challenges of responding in a global crisis. Sexual and Reproductive Health Matters. 2020;28(1):1-3.
4. Lee S, Hitt WC. Clinical Applications of Telemedicine in Gynecology and Women's Health. Obstetrics and

- Gynecology Clinics of North America. 2020;47(2):259-270.
5. Организация оказания медицинской помощи беременным, роженицам, родильницам и новорожденным при новой коронавирусной инфекции COVID-19. Методические рекомендации. М. 2020. «Неплановая операция»: коронавирус отменил аборты. Ссылка активна на 20.07.20.
 7. Guttmacher Institute. Adding it up: Investing in Contraception and Maternal and Newborn Health 2017. Accessed July 20, 2020.
 8. Sedgh G, Singh S, Hussain R. Intended and unintended pregnancies worldwide in 2012 and recent trends. *Studies in Family Planning*. 2014;45(3):301-314.
 9. Кулагина Н.В. Отношение к абортам современных юношей и девушек в возрасте 15—17 лет. *Социодинамика*. 2018;1:32-40.
 10. Henshaw R, Naji S, Russell I, Templeton A. Psychological responses following medical abortion (using mifepristone and gemeprost) and surgical vacuum aspiration. A patient-centered, partially randomised prospective study. *Acta Obstetrica et Gynecologica Scandinavica*. 1994;73(10):812-818.
 11. Аполихина И.А., Горбунова Е.А., Кубицкая Ю.В., Ипатова М.В., Куземин А.А. Реабилитация женщин после хирургического прерывания беременности в первом триместре: чья ответственность? *Медицинский совет*. 2015;11:84-89.