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INNOVATIVE METHODS FOR COMPLICATION PREVENTION IN MEDICAL ABORTION

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ABSTRACT:

Safe medical abortion is one of the recognized methods of terminating an unwanted pregnancy within the framework of family planning. Reducing early and late complications after abortion and preserving reproductive function are key goals in modern obstetrics and gynecology. The use of medical abortion has led to a decrease in cases of postpartum endometritis, septic conditions, secondary infertility, as well as purulent-septic complications and maternal mortality. However, the issue of preventing complications after medical abortion remains insufficiently studied. This article presents an analysis of the problem.

Objective: To develop an algorithm for preventive measures aimed at reducing early and late complications after safe medical abortion and preserving reproductive health.

Materials and Methods: The study was conducted at Clinic No. 1 of Samarkand State Medical University and Samarkand Maternity Complex No. 1 from 2022 to 2023. A total of 60 women were examined and divided into two groups:

- Group 1: 30 women who underwent medical abortion. The effectiveness of drugs such as mifepristone and misoprostol was evaluated.
- Group 2: 30 women who underwent surgical abortion.

The examination included anamnesis collection, laboratory tests (complete blood count, urinalysis), bacteriological analysis of vaginal discharge, coagulation profile, blood typing, and pelvic ultrasound.

Results and Discussion. Group 1 – Medical Abortion:

Procedures were carried out at gestational ages ranging from 4 to 12 weeks using two different methods.

Method 1 (Gestational age: 4–8 weeks, n=15):

- Mifepristone (1 tablet orally)
- Followed by 800 mcg of misoprostol within 48 hours
- Then an additional 400 mcg after 1 hour
- Effectiveness: 86.7%
- Adverse reactions: Drug hypersensitivity – 6.7%, abortion complications – 6.7%
- Total misoprostol dose: 1600 mcg

Method 2 (Same group):

- Mifepristone (1 tablet orally)
- 400 mcg of misoprostol after 48 hours
- Another 400 mcg over 3 hours
- Effectiveness: 53.4%
- Drug resistance: 20%
- Complications: Incomplete abortion – 26.7%, thrombosis – 26.7%

Method 1 (Gestational age: 9–12 weeks, n=15):

- Mifepristone (1 tablet orally)
- 800 mcg misoprostol after 48 hours
- Additional 400 mcg after 1 hour
- Effectiveness: 93.3%
- Adverse reactions: Drug hypersensitivity – 6.7%, cervical retention – 13.3%
- Total misoprostol dose: 1600 mcg

Method 2 (Same group):

- Mifepristone (1 tablet orally)
- 400 mcg misoprostol after 48 hours
- Additional 400 mcg over 3 hours
- Effectiveness: 80.1%
- Drug resistance: 6.7%
- Complications: Incomplete abortion – 13.3%, bleeding – 20%

- Miscarriage was effectively managed by an additional 400 mcg misoprostol after 1 hour
- Total dose: 1600 mcg

Drawbacks of medical abortion included:

Severe pain, drug resistance, fever, incomplete expulsion of fetal tissue, bleeding, and septic complications.

Group 2 – Surgical Abortion:

Gestational age: 4–8 weeks (n=15):

- Effectiveness: 100%
- Complications: Postoperative endometritis – 13.3%

Gestational age: 9–12 weeks (n=15):

- Effectiveness: 100%
- Complications: Postoperative endometritis – 6.7%

Drawbacks of surgical abortion:

Signs of acute inflammation of the reproductive organs, risks related to anesthesia (e.g., uterine atony, nausea, vomiting, headaches), and postoperative complications such as endometritis, septic infections, and maternal mortality.

Summary of Results. Medical abortion (Group 1) showed effectiveness between 86.8% to 98.5% with Method 1, and 100% when misoprostol was increased to 1600 mcg for drug-resistant cases.

- Method 2 showed effectiveness ranging from 53.4% to 80.1%, with 1600 mcg of misoprostol required in complicated cases.
- Surgical abortion (Group 2) had 100% effectiveness across both gestational ranges, but with higher rates of complications, particularly postoperative endometritis (10% to 23.1%).

Conclusion: Medical abortion is preferable as a primary method of pregnancy termination due to its lower risk of complications. It contributes to reducing secondary infertility, bleeding, endometritis, septic conditions, surgical interventions, and maternal mortality.

Early-term abortion is associated with fewer complications. Medical abortion is safer both for a woman's immediate health and future fertility. Strict adherence to aseptic and antiseptic protocols and the prophylactic use of antibiotics are crucial in preventing infectious complications. Since abortion is inherently a traumatic event, early pregnancy detection and improved public awareness about contraception are essential preventive strategies.

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