#### ОРИГИНАЛЬНЫЕ СТАТЬИ

## ORIGINAL ARTICLES

УДК 618.5-089.888.61

# DIFFERENTIAL APPROACH TO CONTRACEPTION IN WOMEN WHO HAVE UNDERGONE CESAREAN SECTION

L. R. Agababyan, Z. A. Nasirova, S. E. Makhmudova

Department of Obstetrics and Gynecology, Faculty of Postgraduate Education Samarkand state medical institute, Samarkand, Uzbekistan

**Keywords:** cesarean section, reproductive health, intrauterine device, contraceptive.

**Таянч сўзлар:** кесар кесиш операцияси, репродуктив саломатлик бачадон ичи воситаси, контрацепция. **Ключевые слова:** кесарево сечение, репродуктивное здоровье, внутриматочная спираль, контрацепция.

Cesarean section is one of the most common surgical interventions in the world, and its frequency continues to increase, especially in high and middle income countries. Although a cesarean section can save lives, it is often performed in the absence of medical indications, which puts women and their children at risk of developing health problems in the short or long term.

## КЕСАР КЕСИШ ОПЕРАЦИЯСИНИ ЎТКАЗГАН АЁЛЛАРДА КОНТРАЦЕПЦИЯНИНГ КУЛЛАНИЛИШИ ДИФФЕРЕНЦИАЛ ЁНДАШУВИ

Л. Р. Агабабян, З. А. Насирова, С. Э. Махмудова

Акушерлик ва гинекология кафедраси, дипломдан кейинги таълим факультети Самарканд давлат тиббиёт институти, Самарканд, Ўзбекистон

Бугунги кунда кесар кесиш операцияси дунёда энг кўп тарқалган жаррохлик амалиётлардан бири бўлиб, кундан кунга унинг частотаси ошиб бормокда, айникса ривожланган мамлакатларда. Кесар кесиш операцияси одам ҳаётини саклаб қоладиган амалиётлардан бири бўлсада, кўпинча бу операция тиббий кўрсатмаларсиз бажарилиб, она ва бола ҳаётини хавф остига қолдирмокда.

## ДИФФЕРЕНЦИРОВАННЫЙ ПОДХОД ПРИМЕНЕНИЯ КОНТРАЦЕПЦИИ У ЖЕНЩИН, ПЕРЕНЕСШИХ КЕСАРЕВО СЕЧЕНИЕ

Л. Р. Агабабян, З. А. Насирова, С. Э. Махмудова

Кафедра акушерства и гинекологии ФПДО

Самаркандский государственный медицинский институт, Самарканд, Узбекистан

Кесарево сечение является одним из наиболее распространенных хирургических вмешательств в мире, при этом частота его выполнения продолжает возрастать, особенно в странах с высоким и средним уровнем дохода. Хотя, кесарево сечение может спасать жизни людей, оно нередко выполняется при отсутствии медициских показаний, что подвергает женщин и их детей риску развития проблем со здоровьем в кратко- или долгосрочной перспективе.

The new WHO statement emphasizes the importance of taking into account the needs of the patient in each particular case and the abandonment of the practice of achieving the targets.

**Material and research methods:** Under observation were 30 women who underwent a cesarean section in the maternity complex number 2 in the city of Samarkand. Women were selected for intraoperative IUD insertion. The exclusion criteria were as follows:

- labor delivery
- clinical symptoms of infection
- -inflammatory processes of the pelvic organs and history of ectopic pregnancy
- long anhydrous period
- tight attachment of the placenta
- -the failure of the uterine scar.

All women gave informed consent for post-placental IUD insertion during cesarean section. The Navy was distributed free of charge, as a state family planning service. IUD Cu T 380 A was introduced into the uterine cavity after removal of the placenta using Kelly forceps. Control examinations were carried out immediately before discharge of the puerperal, after 3-4 weeks, and 6 and 12 months after the introduction of the IUD. Technique postplacental introduction of the IUD

during cesarean section: After uterine massage and cessation of bleeding, we make sure that no tissue remains in the uterus. With the help of an exciting tool (Kelly forceps) we place the IUD on the bottom of the uterus under the control of vision. Before suturing a wound in the uterus, we direct the threads of the IUD to the internal cervix. Antennae do not infer, as this increases the risk of developing an infection.

To clarify the position of the IUD in the uterus, ultrasound was performed, the presence of symptoms of infection, the duration of breastfeeding, the restoration of menstrual function, pregnancy and satisfaction with the method were determined.

**Results of the research:** The age of the examined women ranged from 20 to 40 years, the average age was  $26.7 \pm 0.2$  years. Of the 30 women, 12 were urban, 18 rural residents. 19 women had a higher education, 11 secondary (Fig.1, 2).

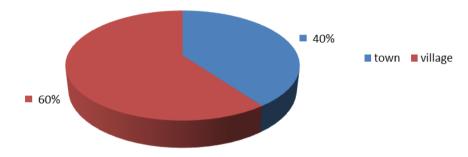


Fig.1. Distribution of women by place of residence.

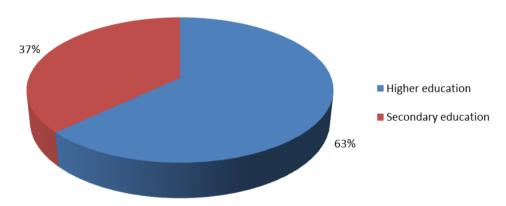


Fig. 2. Social status of women.

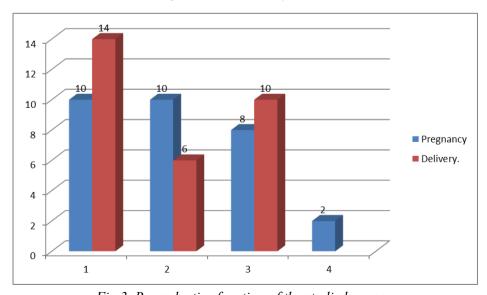


Fig.3. Reproductive function of the studied women.

10 women had 1 pregnancy history, 10 women had 2 pregnancies, 8 women had 3 pregnancies, and the remaining 2 women had 4 or more pregnancies, i.e. all women were re-pregnant (Fig. 3).

4 women had a history of 1 abortion. Before the onset of this pregnancy, 18 women did not use contraceptives. Number of children at home: 6 women have 1 child, 16 women have 2 children, 2 women have 3 children, 6 women did not have children (Fig. 4).

The surveyed women in history had the following gynecological and extragenital diseases: infertility in 2 women, spontaneous abortion in 3 women, anemia in 7 women, hepatitis in 5 women, high myopia in 3 patients (Fig. 5).

12 women (40%) underwent cesarean section surgery according to a combination of several indications (scar on the uterus, fetal distress, OAA). 6 women used the IUD before, 25 women (83.3%) further planned pregnancy. All women (100%) before the operation were consulted on family planning methods, including full information about the IUD (Table 1).

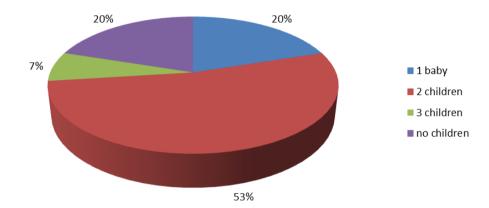


Fig. 4. Number of women's children.

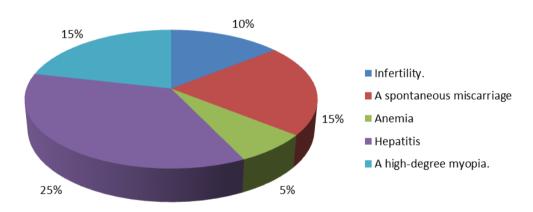


Fig. 5. Women's previous diseases

Table 1.

#### **Indications for cesarean section**

No	Indications	Amount (abs)	%
1	Head-pelvis disproportion	6	20,0
2	macrosomia	4	13,3
3	Pelvic presentation	1	3,3
4	Preeclampsia	2	6,7
5	Anomalies of labor	1	3,3
6	The combination of several indications	12	40,0
7	Transverse position of the fetus	1	3,3
8	High myopia	3	100,0

We did not observe any complications associated with intraoperative IUD insertion. In order to study the risk of intraoperative IUD insertion for the development of infectious processes in the postoperative period, we conducted an immunological examination of 24 women aged from 22 to 37 years after cesarean section. Women were divided into 2 groups. The main group consisted of women who underwent the Cu T 380 A navy during a cesarean section. The comparison group consisted of women who underwent a cesarean section without a navy. To study the serum concentrations of the main anti-inflammatory cytokines of the immune system, IL1 $\beta$  and IL-8, peripheral blood was collected for 5-6 days after surgery.

Both of these cytokines are known to possess pronounced anti-inflammatory properties and are the main regulatory cytokines of the immune system. Our studies have shown that the level of IL-1 $\beta$  in women of the main group was  $2.52 \pm 0.18$  pg / ml, whereas in women of the comparison group -  $2.32 \pm 0.15$  pg / ml.

As can be seen, there was no significant difference between the groups, although when compared with the generally accepted norm, there was a significant suppression of IL-1 $\beta$  in women of both groups, which indicated the suppression of the immunoreactivity of women after cesarean section. The results obtained are presented in table 2.

Table 2. Study of serum concentrations of the main pro-inflammatory cytokines IL-1β and IL-8.

Indicator	Norm	Main group	comparative group
IL-1β	9,94±1,78	2,52±0,18*	2,32±0,15*
IL-8	5,48±1,24	7,80±1,58*	8,26±1,59*

*Note:* \* - differences with control values p < 0.05

In 29 women, the cesarean section was performed against the background of spinal anesthesia, in 1 patient under general anesthesia. All 30 women had surgery: laparotomy. C-section in the lower uterus segment. Thirty newborns were removed: 30 alive, 1 dead, 29 premature, 1 premature and 7.5 points in average USE. During the first 2 hours, 25 newborns were attached to their breasts, 3 newborns before 24 hours, and 1 newborns after 24 hours.

## **Breastfeeding duration:**

Four women (13.8 per cent) were breastfed for 1 year, 5 women (17.2%) 8 months, 3 women (10.3%) 7 months, 14 women (48.3%) 6 months, 3 women (10.3%) 4-5 months.

Menstrual recovery was observed in 30 women after cesarean section. No woman was pregnant with contraception. 25 women were completely satisfied with contraception, 3 partially and 2 women were not satisfied. There was 1 case of IUD removal due to bleeding, spontaneous expulsions were found in 1 woman (3.3%).

#### **Conclusion:**

The introduction of IUDs during cesarean section has many advantages:

- Convenience women leave the facility with a contraceptive,
- Long-term contraceptive effect after a single IUD (latest data up to 12 years)
- Security
- Absence of systemic metabolic on the woman's body
- Rapid restoration of fertility after IUD extraction
- No impact on breastfeeding

We have observed the results of intraoperative IUD administration for 12 months and have not found any serious complications associated with IUD administration, such as endometritis and uterine perforation. Our studies show that there are certain changes in the state of cytokines in women after cesarean section. At the same time, we revealed a significant suppression of serum concentration of IL-1 $\beta$  against the background of increased production of IL-8, which is an important anti-inflammatory cytokine of the non-specific immune system that immediately responds to the introduction of foreign materials into the body.

Of course, the data obtained by us require further and deeper study of the state of basic immune system cytokines in women before and after IUD administration. It is important for us in these studies to study the effect of IUDs on women, which can be used as a diagnostic and/or prognostic criterion for complications associated with the introduction of IUDs into the uterine cavity. On the other hand, the absence of reliable differences between the studied groups of women once again testifies to the absence of adverse effects associated with IUD administration.

The IUD proved to be a very safe and effective method of contraception. In the groups between women with intraoperative IUD injection and women who underwent Cesarean section without contraception there was no difference in the frequency of infection, postoperative pain and average number of postoperative days. The frequency of expulsions corresponded to 3.3% of cases during 1 year of observation, which coincided with the opinions. Therefore, the expulsions at intraoperative IUD injection are observed less in comparison with the postnatal IUD injection. The analysis of the results of monitoring of patients with IUDs allowed to establish high contraceptive efficacy of the method; no cases of pregnancy were registered in any case.

#### **References:**

- 1. Азанова Д.Б. Морфологическое исследование биоптатов миометрия после кесарева сечения / Д.Б. Азанова, Р.И. Габидуллина, П.Н. Резвяков // Четвертый Росс. науч. форум "Охрана здоровья матери и ребенка": Тез. докл., М., 2002. С.8-9.
- 2. Вихляева Е.М. Возможность выбора и приемлемость различных методов контрацепции после родов / Е.М. Вихляева, Е.И. Николаева // Акуш. и гин. 2003. №6. С.20-24.
- 3. Гаспарян Н.Д. Рецепция половых стероидов у рожениц с рубцом на матке / Н.Д. Гаспарян, В.И. Красно-польский, Е.Н. Карева и др. // Рос. вестн. акушера гинеколога. 2010. № 1. С.5-7. I ll
- 4. Гаспарян Н.Д. Дополнительные критерии несостоятельности рубца на матке / Н.Д. Гаспарян // Рос вести, акушера-гинеколога. 2010. № 2. 4-7.
- Краснопольский В.И. Самопроизвольные роды у беременных с рубцом на матке как альтернативный и безопасный метод родоразрешения / В.И. Краснопольский, Л.С. Логутова // Акуш. и гин. 2000. №5. С. 17-22.
- 6. Пахомова Ж.Е., Ан А.В. Материнская летальность после кесарева сечения Проблемы репродукции, 3, 2010 с. 83-86.
- 7. Чивильгина В.В. Обоснование дифференцированных контрацептивных технологий у женщин в послеродовом периоде: Автореф. дис. ... канд. мед. наук:14.00.01. М., 2015. 22с.
- 8. Яглов В. В. Особенности репродуктивного поведения и контрацепции у женщин после родов: Автореф. дис. ... канд. мед. наук: 14.00.01. М., 2000. 28с.