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MANAGEMENT OF PREGNANT WOMEN WITH A UTERINE SCAR

Magzumova N. M., Soatova N. A., Akhmedova G. A.
Tashkent Medical Academy. Tashkent, Termez

Annotation: According to various authors, the frequency of surgical births in large obstetric clinics and perinatal centers varies from 25 to 50%. According to WHO recommendations, the incidence of CS should not exceed 10–15%.In recent years, there has been an increase in the birth rate in the Republic of Uzbekistan. An increase in the birth rate leads to an increase in obstetric complications and births by cesarean section (CS). The most common indications for cesarean section and risk factors leading to an increase in the number of surgical deliveries have been identified.

Key words: pregnancy, cesarean section, risk factors, uterine scar.

Relevance. Today, the main feature of the development of modern obstetrics is the reduction in the level of perinatal losses through the use of cesarean sections (CS). According to various authors, the frequency of surgical births in large obstetric clinics and perinatal centers varies from 25 to 50%. According to WHO recommendations, the incidence of CS should not exceed 10–15% [4,5]. An analysis of data from 121 countries showed that during the period from 1990 to 2014, the average global level of CS increased by 12.4% [5].

In the context of an increase in the frequency of abdominal delivery and its possible intra- and postoperative complications, it is of great importance to search for possible reserves for reducing the incidence of repeated surgical births. In this regard, today the most promising direction in the management of women with a uterine scar is to study the possibility of delivery through the natural birth canal.

So, according to V.I. Krasnopolsky et al. [5], the frequency of CS in some large perinatal centers in Russia reaches 40% or more. The increase in the number of women with an operated uterus, as well as the performance of reconstructive and organ-preserving operations on the uterus, creates a new direction in modern obstetrics - the management of pregnancy and childbirth in women with an operated uterus [4,5,14,15]. Despite the increase in the frequency of operative births, maternal morbidity during preventive repeat cesarean section is 3–4 times higher than during natural birth after cesarean section [8,9,10]. The frequency of intraoperative and postoperative complications according to various authors during repeated surgical births ranges from 2 to 20.5%, which is always significantly higher than during the first cesarean section [6,14]. The frequency of births with a uterine scar does not exceed 15%. However, the literature provides data on repeated vaginal births in women with a uterine scar in 30-80% after cesarean section [4,7,11].

The purpose of the study was to determine factors that contribute to an increase in operative delivery in pregnant women with a uterine scar after cesarean section. Clinical and anamnestic data and the course of pregnancy and childbirth in women with a uterine scar were studied. The condition of the scar on the uterus

and the lower segment of the uterus was studied and a comparative assessment of the echographic indicators of the condition of the scar on the uterus and the lower segment of the uterus was carried out.

Material and methods. A retrospective analysis of 95 birth histories of pregnant women with a uterine scar was carried out, which were divided into 3 groups: main groups I and II and a control group.

- Group I (n=68) – pregnant women with a uterine scar who were delivered by cesarean section;
- Group II (n=27) – pregnant women with a scar on the uterus, who were delivered through the natural birth canal.

The pregnant women examined were aged from 20 to 45 years, the average age of women in the main group was 28.4±4.7 years (Table 1).

Table 1. Distribution of women in a retrospective study by age, abs.,% M±m

Age	Retrospective group, (n=95)			
	I group, n=68		II group, n=27	
	Abs.	%	Abs.	%
20-24	16	23,5	5	18,5
25-29	32	47,1	11	40,7
30-34	10	14,7	8	29,6
35-39	7	10,3	2	7,5
40-45	3	4,4	1	3,7
Middle age	28,4±4,7		29,1±5,1	

Results obtained. When analyzing the age groups of women, it was revealed that in the main group women aged 20–24 years and 25–29 years prevailed, while at the same time women aged 25–29 years in the control group were 1.1 times more than in the main group, but women aged 20–24 years were more common in the main group, which is 1.5 times higher than in the control group**.** In addition, it was revealed that there were 1.5 times more women aged 30–34 years in the control group than in the main group.

Thus, in both groups there was a predominance of young pregnant women, which may not be a significant factor in the management of pregnancy and childbirth.

Table 2. Distribution of women by parity, absolute, %

Parity	Main group						Control group, n=30	
	I group n=68		II group n=27		group, n=95			
	Abs.	%	Abs.	%	Abs.	%	Abs.	%
Primigravida	-	-	-	-	-	-	11	36,7
Multipregnant	27	73	14	58,4	41	67,2	14	46,7
Multiparous	10	27	10	41,6	20	32,8	5	16,6

The study of parity of pregnant women showed that multiparous and multiparous women in the main group were 46.7 and 16.6%, respectively, while in the control group the above figures reached 46.7 and 16.6%, respectively. In the control group there were 36.7% primigravidas with a normal course of pregnancy and childbirth.

Among the studied women in the main group, there were 2.0 times more urban women than rural women, while this figure was 4 times higher in the control group. In addition, there were 1.2 times more urban women in the control group than in the main group.

At the first stage, a retrospective analysis of the birth history of women with a uterine scar was carried out. The objective of the retrospective study was to identify the number of CSs, study the features of the course of pregnancy and childbirth, the structure of indications for operative childbirth, factors influencing the setting of indications for operative childbirth, taking into account anamnestic data.

We analyzed 95 birth histories of women with a uterine scar, who, depending on the method of delivery, were divided into 2 groups: with surgical birth for various indications (n=68) and vaginal birth after cesarean section (n=27).

An analysis of the structure of indications for caesarean section during previous surgical births in women was carried out. In the overall structure, hypertensive syndrome (severe preeclampsia) prevailed in every fourth woman (25%). Then premature abruption of a normally located placenta and placenta previa (21.7%). Further disproportion in labor (16.7%), fetal distress (10%), antepartum rupture of membranes with unsuccessful induction of labor (8.3%). Also, when setting the indications, such conditions as cardiac pathology, a history of infertility, pathologies of the visual organs and the woman's desire were important.

A study of the structure of indications for operative delivery in women in the retrospective analysis group showed that the indications for operative delivery in women with a uterine scar came to the fore prenatal rupture of the membranes, which was observed in almost every fifth woman (22.2%). An interesting fact is that prenatal rupture of the membranes in combination with a uterine scar was the only indication for emergency caesarean section. At the same time, the possibility of expectant tactics or active tactics through induction of labor was not taken into account, which is practically not used in the conditions of our country. The second most common indication was a scar on the uterus after 2 cesarean sections (19.4%), which, according to local protocols, is considered an absolute indication for cesarean section.

When establishing indications for repeated surgical delivery, great importance was attached to the woman's refusal or desire when choosing a method of delivery (11.1%). In addition, quite often false birth in women with a uterine scar served as an indication for repeated surgical delivery (11.1%). Severe preeclampsia tends to decrease with indications for cesarean section (8.3%), cardiac pathology (8.3%), pathology of the organs of vision (5.5%) tended to increase among the indications for repeated surgical delivery in women with operated uterus.

A study of the degree of cervical maturity according to the Bishop scale in women with a uterine scar revealed that in group 1, 93.3% of cases revealed cervical maturity of 0–5 points, which is 9.3 times more than in group 2. Perhaps this was a significant reason for the completion of labor through surgical delivery. At the same time, in the 2nd group of women, cervical maturity of 6 - 8 and 9 - 13 points was observed in 63.3 and 26.6%, respectively, which is significantly higher than in the group of women with surgical birth ($P < 0.05$). Therefore, from the data presented above, we can conclude that cervical maturity on the Bishop scale above 5 points plays a decisive role in the delivery of women with a uterine scar through the vaginal birth canal.

Table 3. Condition of the cervix in women with a uterine scar, abs., %

Cervical maturity according to Bishop	Retrospective group (n=95)			
	I group, n=68		II group, n=27	
	Abs.	%	Abs.	%
Immature cervix (0 – 5 points)	28	93,3	3	10
Maturing cervix (6 – 8 points)	2	6,6	19	63,3
Mature cervix (9 – 13 points)	0	-	8	26,7
History of vaginal birth	18	26,4	17	63,0

Analysis of obstetric and somatic anamnesis showed that among the women studied there was a diversity of occurrence of factors. Among obstetric factors, a history of vaginal birth was of particular interest, which occurred in group 2 in 63.0% of cases, which was 2.4 times more often than in group 1 (26.4%), which was of great importance in management of women with a uterine scar through vaginal delivery. Reproductive losses in the form of artificial abortions occurred more in the group of women with natural birth (29.6%), and 3 times more than in group 1.

Table 4. Obstetric and somatic anamnesis of women in a retrospective study, abs., %

Obstetric and somatic status	Retrospective group, (n=95)			
	I group, n=68		II group, n=27	
	Abs.	%	Abs.	%
History of hypertensive syndrome	13	19,1	10	37,0
History of vaginal birth	18	26,4	17	63,0*
Abortion	7	10,3	8	29,6
Miscarriages	9	13,2	3	11,1
Obesity	38	55,9**	11	40,7
Kidney diseases	22	32,3	10	37,0
Diseases of the cardiovascular system	5	7,3	6	22,2
Anemia	58	85,2	16	59,3
Previous childhood diseases	27	39,7	14	51,8

Note: *- P <0.05 in relation to the group of women with operative delivery; **- P <0.05 in relation to the group of women with vaginal birth

A study of somatic diseases in pregnant women revealed that iron deficiency anemia was most often observed (85.2 and 59.3% of cases in both groups, respectively), obesity was observed 1.4 times more (55.9%) in group 1 than in group of women with vaginal birth (40.7%). Kidney diseases in both groups did not have significant differences, while diseases of the cardiovascular system occurred in 7.3% of cases in group 1, which is 3 times less than in the group with vaginal birth.

Conclusions: Thus, a retrospective analysis of childbirth in women with a uterine scar showed that when managing pregnant women with a uterine scar, the condition and maturity of the cervix, as well as the presence of a history of vaginal birth, were of great importance in deciding the method of delivery.

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