

CHARACTERISTICS OF UTERINE INVOLUTION AFTER DELIVERY IN NURSING MOTHERS ACCORDING TO ULTRASOUND EXAMINATION DATA

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ABSTRACT

Ultrasound parameters of uterine involution after vaginal delivery and caesarean section in 44 lactating women and Doppler data of uterine vessels in 37 puerperas are presented.

АННОТАЦИЯ

Представлены УЗИ параметры инволюции матки после вагинальных родов и кесарева сечения у 44 кормящих женщин и данные доплерометрии сосудов матки у 37 родильниц.

ANNOTATSIYA

Ultratovush tekshirishlar orqali 44 emizikli ayollarda fiziologik tug'ruq va kesar kesishdan keyin bachadon involyutsiyasining ultratovush ko'rsatkichlari va 37 tug'ruq davridagi bachadon tomirlarining Doppler ma'lumotlari keltirilgan.

INTRODUCTION

Lactation and breastfeeding, being a new stage after the end of pregnancy, are a unique state of the female body [3]. to the mother's breast, the joint stay of mother and child in the same room, feeding at the request of the child, etc., in general, have a positive effect on the maternal body, favorably affect uterine contraction, reducing the likelihood of postpartum hemorrhage and accelerate uterine involution. In connection with the above, it became necessary to re-determine the ultrasonic parameters of uterine involution in the postpartum period in women who gave birth naturally, vaginally, and abdominally.

In connection with the above, we have delivered. In nulliparous women who underwent caesarean section, the parameters of the height and width of the uterus significantly

exceeded those in women who gave birth through the vaginal birth canal, on the 2nd day - by 8.7% and 12.1% [8].

Purpose: to study the ultrasound characteristics of uterine involution in nursing mothers who underwent normal labor and caesarean section.

MATERIAL AND RESEARCH METHODS

44 women aged 19 to 36 years were examined in the first 6-7 days after childbirth. The first group consisted of 26 women after physiological childbirth and the second group of 18 women delivered by caesarean section. The selection criterion for the groups was the weight of the newborn in the range of 2700-3700 grams, the absence of multiple pregnancies, polyhydramnios, uterine fibroids, developmental anomalies, i.e. factors of overstretching of the uterus, contributing to the subinvolution of the uterus. The first group included relatively healthy women who had no complications in childbirth: weakness of labor, preeclampsia, bleeding during and / or after childbirth, any intrauterine interventions and benefits. In accordance with the principles of safe motherhood, all women in labor underwent active management of 3 stages of labor with the introduction of 10 units of oxytocin intramuscularly and the principles of breastfeeding: early attachment of the child to the breast, feeding at the request of the child, etc. In the women of the second group, indications for operative delivery were: a scar on the uterus after caesarean section in 10, of which 2 had prenatal rupture of water; clinically narrow pelvis - in 6 and anomalies of labor activity - in 2. Cesarean section in all operated women was performed according to the MisgavLadach method. Newborns were applied to the breast after the end of the operation and the effect of anesthesia, after the transfer of the patient to the intensive care unit, in fact, 2-2.5 hours after the birth of the child. Intraoperatively, all women were administered uterotonics: methylergometrine 1 ml intravenously and oxytocin 10 units intravenously. The first three days continued the introduction of oxytocin 0.5 ml intramuscularly 2 times a day. The mother and child were kept together. Ultrasound was performed in dynamics on days 2-3, 4-5 and 6-7 of the postpartum/postoperative period on an SSD - 280 "Aloka" device (Japan), equipped with a high-frequency sensor (5 MHz) (ultrasound doctor - Nikolaeva E.A.). Doppler study of uterine vessels was carried out in 18 puerperas after physiological childbirth and 19 women after caesarean section. There were 10 and 8 primiparous, 8 and 11 multiparous, respectively. The average body weight of newborns in both groups was the same and amounted to 3240g and 3251g, except for 2 cases of twins and 2 large fetuses, where the average total body weight was 4657g. The systole-diastolic

ratio (S/D) and resistance index (IR) were determined in the right and left uterine arteries [1,2]. The data obtained were processed by the generally accepted method of variation statistics. Results and their discussion. Ultrasound parameters of uterine involution after normal delivery and caesarean section in lactating women were analyzed taking into account parity and are presented in Table 3.1.

Table 3.1.

Ultrasound parameters of uterine involution after normal delivery and caesarean section in nursing mothers

The nature of delivery	Primiparous						
	Uterus dimensions, mm						
	2 day		4 day		6-7 day		
	Height	Width	Height	Width	Height	Width	
Normal delivery n = 7	137,9±1,5	124,3± 2,3	119,0± 3,0	107,9 ±2,6	101,4± 1,4	91,4± 1,4	
Cesarean section n = 7	149,7±1,6	139,0±1,6	141,0±0,7	129,1±1,6	115,6±1,1	99,7±0,3	
P	<0,001	<0,001	<0,001	<0,001	<0,001	<0,001	
	Multiparous						
	Normal delivery n=19	142,6±0,9*	127,6±1,4	121,6±1,0	110,3±1,2	102,3±0,9	92,1±0,8
	Cesarean section n = 11	153,6±1,0*	141,3±0,6	141,2±0,6	130,4±0,7	116,9±1,7	100,3±0,9
	P	<0,001	<0,001	<0,001	<0,001	<0,001	<0,001

Note: * - P<0.05, the difference is significant in relation to similar data of primiparous

As follows from the data in the table, in nulliparous women who underwent caesarean section, the parameters of the height and width of the uterus significantly exceeded those of women who gave birth through the natural birth canal, on day 2 - by 8.7% and 12.1% (P<0.001), on day 4 - by 18.5% and 19.5% (P<0.001), and on days 6-7 - by 13.9% and 9.1% (P<0.001). The greatest delay in uterine involution was observed in operated women on the 4th day. After normal repeated births, most indicators of the size of the uterus differed from those of primiparous women by 1-2.5% (P> 0.05), only on the 2nd day of the postpartum period, the height of the uterus exceeded that by 3.6% (P < 0, 05).

In multiparous women after caesarean section, these parameters of the uterus significantly differed from the size of the uterus after normal repeated births and exceeded their values on day 2 by 7.8% and 11.0%, on day 4 - by 16.5% and 18.2% and on days 6-7 - by 14.7% and 8.9%. The greatest delay in uterine involution after caesarean section was also noted on the 4th day. The data on the parameters of the uterus in multiparous women after caesarean section did not significantly differ from the size of the uterus during the first birth that ended in caesarean section, the difference was 0.8-1.5% (P>

0.05), only on the 2nd day of the postoperative period, the height of the uterus exceeded that by 2.6% ($P < 0.05$). Dimitrov A. et al. [4] found that the degree of uterine involution after caesarean section is slower and more unstable, which is more pronounced during repeated operations. Thus, the results of the ultrasonic testing uterine involutions in nursing mothers indicate that it is necessary to take into account the parity of the transferred births and the method of delivery in the first two days. After a caesarean section, despite the prophylactic administration of uterotonics, there is a significant delay in uterine involution in the first 7 days by 9-19%, most pronounced on day 4, compared with women after normal delivery. According to the literature, in addition, the term of delivery and the weight of the fetus are important, so A. Dimitrov et al. The obtained parameters of ultrasound scanning can serve as standards for monitoring uterine contractions in lactating women after normal delivery and after caesarean section.

Analysis of the obtained data during Doppler studies showed that after normal birth in primiparous and multiparas, the systolic-diastolic ratio (S/D) was the same in the right and left uterine arteries, amounting to 2.5 ± 0.1 and 2.6 ± 0.1 , and the index resistance (IR) also did not differ and amounted to 0.59 ± 0.015 on the right and 0.57 ± 0.015 on the left. After caesarean section, a significant difference in S/D was observed in primiparas: for example, on the right S/D was 3.00 ± 0.33 , and on the left - 2.0 ± 1.3 ($P < 0.05$), as well as RI on the right- 0.62 ± 0.01 , and on the left - 0.51 ± 0.01 ($P < 0.05$). After caesarean section in multiparous IR on the right and left did not differ, there was a significant difference in S/D data on the right and left. When compared with the data of group 1, a decrease in S/D and IR of the left uterine artery was noted. When the uterus is overstretched (twins, large fetus), a significant increase in C/D and IR on the left is recorded, which indicates a violation of blood flow in the uterine artery. Thus, based on the results obtained, it can be concluded that in lactating mothers, the data of dopplerometry of the uterine vessels on the 3rd day after physiological delivery can serve as control markers.

In postpartum women after caesarean section on the 3rd day, there is a violation of blood flow in the uterine arteries, especially with an overstretched uterus, which must be taken into account when determining the term for discharge of the patient from the hospital. A retrospective analysis of 70 lactating women was carried out according to a specially compiled questionnaire in the obstetric complex of the Bukhara region of the Karakul region in women with obesity and dyslipidemia, this condition affects the involution of the uterus [6-8]. It was noted that lipid metabolism disorders are significantly higher in patients with GA [7].

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