

## **Management and Characteristics of Pregnancy and Delivery with Genital Prolapse (Clinical Case)**

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### **ABSTRACT**

Pelvic floor dysfunction is one of the most pressing issues in the health and quality of life of women. Pelvic prolapse occurs in 30-50% of women who have given birth. And although this pathology is not life-threatening, it significantly complicates a woman's normal life. Genital prolapse (GP) occurs due to lack of pelvic floor support function. It should be noted that the structures of the pelvic diaphragm are under the influence of dynamic load, resulting in easy rupture of ligaments. However, today it is known that not only mechanical damage is the cause of pelvic organ failure. Many studies have shown that in women with prolapse, the concentration of collagen is reduced or its defective forms are detected, due, in particular, to metabolic disorders and the ratio of ionized forms of magnesium and calcium in the direction of the latter. The article presents modern literature data on the peculiarities of pregnancy and childbirth of women with genital prolapse. An example is a clinical case of a pregnant woman with this complication. A clinical case with grade III GP and management using obstetric perforated pessary, magnesium and progesterone and proved the possibility of vaginal delivery in this pathology.

**KEYWORDS:** genital prolapse, cervical prolapse, pregnancy, childbirth, obstetric perforated pessary, prevention, treatment, childbirth.

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General information. Genital prolapse (GP) - is a disease that is accompanied by a violation of the normal anatomical location of the uterus, vagina, bladder, and rectum with displacement of these organs downward and beyond the vaginal entrance. Genital prolapse is caused by pathological changes in the connective tissue and fascia surrounding the uterus, vagina, bladder, and rectum, as well as increased intra-abdominal pressure, which lead to prolapse and prolapse of the internal genitals [1,2,3].

Risk factors:

#### **1. Increased intra-abdominal pressure:**

- Age;
- Hard physical work;
- Vaginal birth with a large fetus/more than 2 delivery with a small interlabor interval;
- Chronic cough;
- Constipation and increased gas production;
- Excess/insufficient body weight.

#### **2. Disorders of the structure and function of the pelvic fascia:**

- Violation of the synthesis of sex hormones.
- Dysplasia of connective tissue (NDST);
- Traumatic damage to the pelvic floor.

The risks of genital prolapse increase with increasing parity, with the birth children with a large body weight, or uncorrect management of labor and the postpartum period, heavy physical work, excessive or low body weight, the presence of constipation, dysplasia of connective tissue, traumatic damage to the pelvic floor, and hysterectomy. It was established that the frequency of clinically significant prolapse (POP-Q stage 2 or higher) increases with increasing parity as follows: in nulliparous women - 14.6%; under conditions of 1-3 births - 48.0%; under conditions of more than 3 births - 71.2% [4].

Clinical case.

At our department was admitted 36-year-old pregnant woman, P., with complaints of cervical prolapse, difficulty urinating and defecation, a feeling of constant discomfort and

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heaviness in the lower abdomen, a feeling of distension in the vagina, and frequent constipation.

This was the second pregnancy, 15-16 weeks. In the anamnesis, there was one interm delivery 4 years ago, complicated by a long second period (more when 2 hours), cervical tears second and third degrees on both sides, deep vaginal tears, use of the Kristeller method. The child (boy) was born alive, full-term, weighing 4020 g, height 57 cm, Apgar score 5-6. Suturing of ruptures of the birth canal was carried out under intravenous anesthesia for an hour. The child was born in a state of asphyxia, but at the moment its development corresponds to the age norm. 5-6 weeks after childbirth, the woman developed discomfort and a feeling of distension in the vagina, heaviness in the lower abdomen, a feeling of «surplus body» when walking and in time intimate life. The woman addressed these complaints to the doctors, where it was recommended to perform gymnastics to strengthen the muscles of the pelvic floor. In the future, the

situation worsened, which made it much more difficult for a woman to fulfill her professional skills.

The woman is a teacher of choreographic disciplines in a children's dance group, has a height of 160 cm, weight before pregnancy 49 kg, at the time of admission to the hospital, weight 51 kg, asthenic physique, BMI-20.

During hospitalization to the department, the general condition of was assessed as satisfactory, the medical examination did not reveal any pathological changes. During the obstetric examination, measurements of the pelvis were made, and a generally uniformly narrowed pelvis was found. Also, during the external examination of the genitals, the complete prolapse of the cervix from the vagina is determined at a distance of 8 cm in the "lying on a chair" position and 10 cm in the "standing" position. The cervix is significantly hypertrophied, 9 cm in diameter, 6-7 cm long, hyperemic, eroded, with signs of maceration, the external eye of the cervix is slit-like, the opening of the cervical canal is 3 cm (Fig. 1).



Due to the impossibility of carrying out radical (operative) treatment during pregnancy, the following tactic was chosen: carrying out sanitation of the vagina and cervix, followed by the using of a cervical perforated pessary. Taking into

account the hypertrophy of the cervix, a pessary of the largest size 70x30x35 was taken, which was inverted (Fig. 2) to increase the diameter in order to keep the cervix in the area of the vaginal vaults.



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After applying a cervical silicone pessary, the woman noted the relief of the act of urination (reducing the duration of the process, which was 30-40 minutes with breaks), the absence of the feeling of "surplus body" while walking, and the relief of the act of defecation. The only thing that bothered her was that after defecation the pessary was periodically expelled, it required a new decision to put it in place, but with each subsequent week of pregnancy this happened less and less. From the 21st-22nd week of pregnancy, pessary expulsion did not occur, most likely due to the increase in the size of the uterus and its higher location in the abdominal cavity.

Taking into account the extremely negative experience of the first childbirth, the woman wanted surgically delivery by caesarean section. After a conversation and careful discussion of the situation by the doctors' council and because of the repeated labor, the expected weight of the fetus  $3600\pm 200$  g, the possibility of performing a cesarean section operation at the first signs of a disturbance in the condition of the fetus during delivery, the woman agreed with vaginal delivery.

The pessary was removed in the hospital. During vaginal examination, the length of the cervix was up to 5 cm, the thickness of the front lip of the cervix was up to 2 cm, the posterior lip was up to 1.5 cm, the opening of the cervix was 4 cm. The cervix had a dense and elastic consistency.

At full 39 weeks, contractions began, and when the cervix was opened up to 6 cm, rupture of membranes was occurred. Amniotic fluid was normal (clear). The birth was carried out with the use of epidural anesthesia, its duration was 7 hours and 20 minutes, the second period lasted 17 minutes and

ended with the birth of a live full-term boy weigh 3700 g, 53 cm tall and 8-8 points on the Apgar scale.

During the examination of the birth canal, the cervix was in the vagina and extended 1-2 cm beyond the genital slit, was thickened to 1.5-2 cm, had cracks up to 1 cm long, which were sewn with vicryl. After childbirth, a tampon with liniment was placed in the vagina for 12 hours.

At the time of discharge, it is recommended to support breastfeeding, sexual rest for six weeks, to observe a sanitary and hygienic regime, and to carry out a mandatory examination by an obstetrician-gynecologist 6 weeks after childbirth in order to choose the tactics of treatment of genital prolapse.

We hope that our clinical experience will help colleagues in the event of a similar situation.

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