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**СМІЛИВІСТЬ** 

# **Obstetrics and Gynecology**



cleavage of the picosulfate radical molecule and the formation of active diphenol, which has an irritating effect on the mucous membrane. This is manifested by an increase in secretory activity, an increase in intestinal content and stimulation of intestinal motility. Taking sodium picosulfate affects motility and normalizes its activity, regardless of the etiology of constipation.

Advantages of the drug: a controlled effect that occurs within 10–12 hours, which can be modulated by changing the dosage; safety of administration, the drug is approved for use by children from 4 years of age, no side effects were noted in pregnant women, and it is approved for use in the II and III trimesters; a drug of non-systemic action, the effects are realized at the level of the large intestine.

Conclusion. We can single out the following summaries:

1. Intestinal hypotonia during pregnancy is nothing more than a protective reaction of the body, but its consequence is constipation, which is considered a physiological process.
2. The regulation of bowel movements during pregnancy changes due to endocrine processes. The automatic rhythmic activity of the intestines in pregnant women is weakened due to an increase in the excitability threshold of its receptors: serotonin, acetylcholine, histamine
3. Pregnant women in the II and III trimesters of pregnancy may be prescribed sodium picosulfate. The drug increases intestinal peristalsis and has minimal side effects.
4. To prevent complications, you should review your diet and make certain adjustments. Water is important: you should drink at least 1.5 liters of water.

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## **FEATURES OF ULTRASOUND DIAGNOSIS OF GENITAL PROLAPSE IN OBESE WOMEN**

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The problem of genital prolapse (GP) is of great medical and social significance due to its negative impact on both the state of health and the quality of life of a woman. Excess



weight is one of the factors in the development of pelvic organ prolapse: increased intra-abdominal pressure secondary to obesity has a negative effect on the condition of the ligamentous-fascial and muscular apparatus of the small pelvis. In 2nd-3rd degrees of obesity, the effectiveness of surgical treatment is essentially reduced, while the high probability of relapses and repeated surgical intervention complicates the rehabilitation process. An objective preoperative examination of the patient contributes to establishing the correct diagnosis, choosing a correction method and determining the risk of recurrence. Unfortunately, today there is no unified view on diagnostic approaches and the value of various diagnostic methods in the preoperative period in patients with GP and extragenital disorders. Methods that allow determining anatomical and topographical changes in the perineum, pelvic floor muscles, bladder, and rectum are not widely used. In particular, the use of ultrasound in the examination of patients with GP can contribute to the accurate determination of anatomical and functional abnormalities and the choice of pathogenic therapy.

The purpose was to clarify the capabilities of ultrasound in improving the preoperative diagnosis of genital prolapse in women with extragenital disorders.

**Materials and methods.** The study involved examination of 117 women with genital prolapse, of whom 20 had GP accompanied by obesity (main group), 22 patients with GP did not have significant extragenital disorders (comparison group). The patients underwent pelvic ultrasound (US), in particular, transvaginal echography and dopplerometry of the vessels of small pelvis and perineum using Philips HD 11XE device.

Ultrasound scanning was performed using a transvaginal sensor (high-frequency linear sensor); the study also implied vaginal or perineal scanning (for example, in case of cicatricial deformation of the vagina). The patients were examined on a gynecological chair in a standard position — lying on the back with legs bent at the knees. The bladder held up to 200 ml of urine. First, the pelvic floor was examined, the sensor was installed vertically at the level of the vaginal opening, a series of parallel transverse scans from the anus in the direction of the cervix were performed, determining preservation of the anal sphincters, the topography and linear dimensions of the muscles of pelvic diaphragm, the height of the tendon center of the perineum and the position of m.



levator ani bundles. Longitudinal scanning was employed to evaluate the thickness of the levators. The capacity of the internal sphincter of the urethra was evaluated using 3D reconstruction technique or by assessing indirect signs of sphincter insufficiency. The study also assessed the length of the urethra (from the accessible visualized area to the bladder neck, the width of the urethra at the level of the bladder neck, its relation to the lower edge of the symphysis, the presence or absence of prolapse of the posterior wall of the bladder (cystocele). The angle of deviation of the urethra from the vertical axis of the body (angle A) was measured and the angle formed by the posterior wall of the urethra and the posterior wall of the bladder (angle B). Further, vaginal ultrasound was carried out to evaluate the position of the uterine cervix relative to the symphysis and the inlet to the vagina and determine signs of deformation and structural changes in the rectum, the presence of a rectocele and the position of the mucous membrane of the posterior vaginal wall.

Variants of GP in obese women included the following impairments: elongation and cicatricial deformation of the cervix (2/10%), prolapse of the anterior wall of the vagina – cystocele (9/45%), prolapse of the posterior wall of the vagina – rectocele (8/40%), incomplete internal genital prolapse (9/45%), acute urinary retention (3/15%), urinary incontinence (3/15%), urethrocele (2/10%), vaginal vault prolapse (1/5%), complete prolapse of internal genitalia (4/20%), old postpartum rupture of the perineum (1/5%). Thus, women with obesity were most commonly found to have incomplete prolapse of internal genital organs (45%), cystocele (45%), rectocele (40%), complete prolapse of internal genital organs (20%), acute urinary retention (15%) and urinary incontinence (15%).

In the comparison group, these indicators were determined as follows: complete prolapse in 12 (54.5%) patients, incomplete prolapse in 6 (27.3%), cervical stump prolapse in 1 (4.5%). Besides, women of this group were shown to have cystoceles in 10 (45.5%), rectoceles in 3 (13.6%), stress urinary incontinence in 5 (22.7%), acute urinary retention in 3 (13.6%) and decubitus ulcer in 2 (9.1%) cases.

The following findings were obtained in women with GP and extragenital disorders: in genital prolapse the height of the tendon center was equal to 0.4-0.9 cm (the norm is more than 1 cm), diastasis of the levator legs was 0-1.1 cm (normally absent), m.



bulbocavernosus thickness of 0.4-1.1cm (the norm is more than 1.5cm), m.bulbocavernosus cross-sectional area of 1.3-2.4cm<sup>2</sup> (the norm is 2.0-2.4cm<sup>2</sup>). In case of incomplete prolapse of the uterus or vault of the vagina, the height of the tendon center was equal to 0.3-0.7 cm (the norm is more than 1 cm), diastasis of the levator legs was 0.6-3.5 cm (normally absent), m. bulbocavernosus thickness was 0.4-1.2 cm (the norm is more than 1.5 cm), the cross-sectional area of m. bulbocavernosus was 1.2-2.2 cm<sup>2</sup> (the norm is 2.0-2.4 cm<sup>2</sup>). Complete prolapse of the uterus or vault of the vagina, the height of the tendon center was equal to 0.0-0.5 cm (the norm is more than 1 cm), diastasis of the levator legs was 1.0-3.3 cm (normally absent), m. bulbocavernosus thickness was 0.4-1, 3 cm (the norm is more than 1.5 cm), the cross-sectional area of m. bulbocavernosus was 1.2-2.2 cm<sup>2</sup> (the norm is 2.0-2.4 cm<sup>2</sup>).

Cicatricial changes of the perineum were detected regardless of the age in the form of asymmetry of the tendinous center of the perineum and violation of the contours of muscle bundles, the presence of connective tissue (hyperechoic) inclusions. In 40% of cases, the scar could not be seen during a gynecological examination, but was detected by ultrasound as single hyperechoic inclusions. In 20%, there was asymmetry of muscle bundles, deformation and thinning of the levator, diastasis in the tendon center. Ultrasound is of great diagnostic value due to the fact that this method helps to determine the topography of the injured perineum for surgical correction, and in the postoperative period to detect hematomas, paraproctitis or defects of the rectal mucosa. Conclusions. Genital prolapse is frequently observed in women with extragenital disorders, in particular, bronchial asthma, diabetes and obesity. Current capabilities of ultrasound examination allow us to use them to improve the preoperative diagnosis of genital prolapse in women with extragenital disorders to increase the effectiveness of treatment outcomes.