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CAUSES OF GENITAL PROLAPSE

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Abstract. *Genital prolapse is a general name for disorders in the ligamentous apparatus of the vagina and uterus, which cause the prolapse of the internal genital organs or their descent, for example, prolapse of the uterus, prolapse of the uterus, prolapse of the vagina, prolapse of the vagina. The frequency of certain types of prolapse of the pelvic organs in women under fifty years of age in Russia varies and ranges from 15 to 30%. And by the age of fifty, this figure increases to 40%. Among older women, prolapse and prolapse of the pelvic organs are even more common.*

Their frequency reaches 50-60%.

Key words*: genital prolapse, hypoestrogenism, menopause, vitamin D, surgical interventions.*

Genital prolapse, or prolapse and drooping of the internal genital organs, is a polyetiological disease, in the development of which physical, genetic and psychological factors play a role. Analysis of statistical data shows that in the Republic of Uzbekistan, every fifth patient who consults a gynecologist presents complaints related to prolapse and drooping of the internal genital organs. As the pathological process develops, functional disorders of the bladder and rectum worsen, leading not only to physical and moral suffering, partial or complete loss of ability to work, but in some cases making the lives of these women socially difficult [1, 13].

For many years, there has been a lively debate about the causes of prolapse and pelvic hernia. Despite the efforts of many generations of gynecologists, surgeons, anatomists and doctors of other specialties, there is still no consensus on the etiology and pathogenesis of this condition.

A number of authors believe that prolapse and pelvic hernia develops due to insufficiency of the pelvic floor muscles and should be considered as a type of pelvic hernia. Insufficiency of the pelvic floor muscles is caused by a decrease in the tone of the muscular-fascial structures or their defects, which can be traumatic and non-traumatic (functional) [3, 9, 22].

Factors of traumatic pelvic floor muscle insufficiency: Pregnancy and childbirth (injuries to the soft birth canal, rapid and rapid labor, use of various obstetric aids during childbirth, large fetus). About a third of all women examined indicate birth trauma as the cause of pelvic floor insufficiency symptoms.

There is an opinion about the influence of the duration of the second stage of labor on the risk of pelvic floor muscle insufficiency in the future. According to some data, any pregnancy lasting more than 20 weeks, regardless of the method of delivery, increases the risk of pelvic floor pathology [10].

Chronic increase in intra-abdominal pressure (constipation, heavy physical labor, prolonged static position, presence of abdominal tumors). Women with a more pronounced degree of prolapse are 3 times more likely than patients with minimal manifestations of the disease to note this as the main etiologic factor. heavy physical labor [11, 19].

Mechanical trauma to the muscular-fascial structures of the pelvis, not associated with pregnancy and childbirth (surgical interventions for gynecological pathology) [21].

Traumatic damage to the centers and pathways of the nervous system responsible for regulating the muscular-fascial structures of the pelvic floor and pelvic organs [21]. Risk factors non-traumatic insufficiency pelvic: Connective tissue dysplasia (varicose veins, hernias of various localizations, etc.). Recently, there have been increasing reports of prolapse of the genitals of young women after vaginal delivery, after cesarean section, and even in nulliparous women. These facts suggest that, first of all, pathological changes in the connective tissue, and only then childbirth and obstetric trauma to the pelvic floor contribute to the occurrence of pelvic organ prolapse in young women. The theory of systemic connective tissue dysplasia as the leading cause of prolapse is becoming increasingly widespread. In this case, childbirth and trauma are considered as provoking factors against the background of widespread undifferentiated forms of connective tissue dysplasia. Prolapse of the genitals in women of reproductive age after a single physiological birth and with a preserved hormonal background in the absence of factors contributing to an increase in intra-abdominal pressure is a frequent manifestation of generalized dysplasia of the connective tissue fabrics. [2, 11].

Hypoestrogenism (menopause, castration). It has been established that insufficient concentration of sex steroids potentiates prolapse of the pelvic organs, since the perineal tissues contain a high content of receptors to estrogens and progesterone. In addition, hypoestrogenism, leading to impaired blood circulation and microcirculation of the pelvic floor tissues, aggravates the development of this pathology [21].

Damage to the centers and pathways of the central nervous system responsible for regulating the muscular-fascial structures of the pelvic floor and pelvic organs (tumors of the central nervous system, osteochondrosis, etc.) [10].

Genetic predisposition. Genital prolapse is genetically determined in more than 50% of cases. There is also a suggestion that vitamin D receptor genes are involved in the pathogenesis of the disease [21].

Impaired blood circulation in the pelvic organs and perineal muscles can lead to pelvic floor failure [19].

In recent years, there have been increasing reports on the role of increased body weight as a risk factor for the development of distension, its recurrence, and vaginal vault prolapse after hysterectomy [11].

There is an inseparable interaction of the perineal muscles (especially the muscles that lift the anus and close the genital slit), providing the necessary tone for the pelvic floor and the stability of the connective tissue support system and some of its stretching only under tension. When the integrity of the muscular-fascial structures of the pelvic floor is violated, there is a decrease in contractility and a violation of neuroreflex conductivity. Subsequently, their atrophy and inability to maintain the normal position of the internal genital organs occur. Under the influence of internal bladder and rectal pressure, the tone of the pelvic floor muscles progresses, and the pelvic organs gradually descend. According to some authors, neuropathy n. pudendus, myopathy m. levator ani and connective tissue dystrophy are the three main determinants of pelvic distension [13].

Classification of genital prolapse Pelvic organ prolapse has traditionally been classified by degree, zone of anatomical defect and expected involvement of a particular pelvic organ. The most frequently used classification of prolapse and prolapse of internal genital organs in women was proposed by M.S. Malinovsky: I degree - the vaginal walls reach the entrance to the vagina, and the external os of the cervix is below the spinal spines; II degree - the cervix extends beyond the genital slit, the body of the uterus is located above it; III degree (complete uterine prolapse) - the entire uterus is below the genital slit. There is a division of the type of prolapse according to the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10) [20].

V.V. Bakhaev proposed a working classification of genital prolapse, which divides this pathology into three main groups: by localization; by severity; by the presence of functional disorders. According to the authors, isolated forms of genital prolapse are rare. More often, there is combined damage to the urogenital and pelvic diaphragms. Therefore, with genital prolapse, there are all three types of localization of genital prolapse of varying severity. Relapses of genital prolapse, occurring after surgical treatment, more often manifest themselves in localized forms [8, 15, 17].

As a result of recognizing these problems, in order to more objectively assess prolapse, the International Continence Society created a standardized prolapse quantification system called the POPQ (pelvic organ prolapse quantification), 2006. The POPQ system involves measuring a set of points on the anterior and posterior vaginal walls, cervix and perineal body relative to a specified point (the hymen). All measurements are taken with the patient straining as much as possible.

Symptoms and diagnostics Prolapse of the pelvic organs Symptoms of pelvic organ prolapse are extremely diverse and do not always correspond to the severity of the lesion that caused it. Pelvic organ prolapse and VVP may cause a number of functional disorders of the pelvic organs: urinary incontinence (UI) (imperative UI, stress UI, mixed forms of UI), which is observed in 10–60% of women with genital prolapse; pollakiuria (frequency of urination more than 8 times a day); nocturia (frequency of urination at night more than 2 times); chronic urinary retention; interstitial cystitis; bowel dysfunction (constipation, fecal and gas incontinence are observed in 10–20% of women with genital prolapse); pelvic pain [10]. The following methods are used in patients with pelvic organ prolapse: general clinical examination, including anamnesis, examination, laboratory diagnostics; special methods: patient questionnaire, functional studies of the lower urinary tract (cough test, Valsalva maneuver , tampon test, which allow not only to establish the fact of involuntary loss of urine, but also to some extent to imagine its supposed nature), rectal examination; methods of radiation diagnostics: X-ray, nuclear magnetic resonance; ultrasound examination - the criteria for the normal state of the pelvic floor are the height of the perineal tendon center of at least 10 mm, the absence of levator diastasis , the preservation of muscle bundles , the width of m. bulbospongiosus is not less than 15 mm. The absence of at least one of the indicated signs indicates the failure of the pelvic floor; a comprehensive urodynamic study; electromyography determines the functional state of the pelvic floor muscles [10, 13, 20

The most complete and convenient classification is the methods of surgical treatment of pelvic floor failure, pelvic organ prolapse and their functional disorders, systematized according to the anatomical principle in seven groups of surgical technologies proposed by V.I.

Krasnopolsky (1997) [14]:

Group 1: Plastic surgeries aimed at strengthening the pelvic floor.

Group 2: Operations using various modifications of strengthening and shortening the round ligaments of the uterus and fixation of the body of the uterus.

Group 3: Operations to strengthen the fixing apparatus of the uterus and change its position.

Group 4: Operations with rigid fixation of the internal genital organs (vaginal vault) to the pelvic walls.

Group 5: Operations using alloplastic materials to strengthen the ligamentous apparatus of the uterus and pelvic fascia.

Group 6: Operations to create complete or partial obliteration of the vagina.

Group 7: Radical operations performed through various surgical approaches in combination with operations from groups 4 and 5.

At the same time, the existing variety of operations for genital prolapse does not give the desired effect, especially when analyzing the long-term results of the traditional methods used.

According to a number of authors, after anterior colporrhaphy , the number of relapses reaches 31%, after posterior - 35%. After transvaginal extirpation of the uterus for relapse associated with prolapse of the walls and dome of the vagina, is observed in 43% of cases [18].

Long-term theoretical and practical studies have shown that modern mesh prostheses should have the following qualities [7]:

• sufficient elasticity, strength, transparency, ensure bacterial permeability, stimulate fibrosis and angiogenesis;

• low wicking capacity (which is ensured by monofilament weaving), biological compatibility.

Our practice has shown that the dimensions of the prosthesis should exceed the dimensions of the fascial defect by 3-4 cm, which prevents its displacement and reliably eliminates the central and lateral defects. Optimal dimensions of the prosthesis and the presence of "sleeves" made it possible to fix it not to the edges of the fascial defect, but to the bone structures of the pelvis or to use large tissue arrays, the preserved ligamentous apparatus of the small pelvis (obturator window, sacrospinal ligaments). The performed technique made it possible to eliminate the fascial defect regardless of its localization (for example, central or lateral defects of the pubocervical fascia) [3, 5, 13].

Thus, the problem of genital prolapse is multifactorial and polyetiological . When solving it, significant technical difficulties often arise, associated not only with surgical reconstruction of the pelvic floor, but also with the problem of choosing the least traumatic and effective method of surgical intervention. The long-term, progressive nature of the disease, leading to aggravation of functional disorders, necessitates a reasonable choice (on the one hand, standardized, and on the other - individual) of the method of surgical correction for each patient. Such a comprehensive approach will improve the results of surgical treatment of patients with genital prolapse, reduce the frequency of relapses of this disease and the risk of immediate and remote adverse results of surgical intervention.

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