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НОВЫЙ ДЕНЬ В МЕДИЦИНЕ  
NEW DAY IN MEDICINE**

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## IMMEDIATE AND LONG-TERM RESULTS OF SURGICAL TREATMENT OF GENITAL PROLAPSE IN ELDERLY WOMEN

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### ✓ Resume

*In old age, surgical intervention should be the least invasive and aimed primarily at improving the quality of life and eliminating negative symptoms. When choosing a method for surgical correction of genital prolapse at this age, it is necessary to take into account not only the severity and form of the underlying disease, but also the presence of concomitant intrauterine pathology, as well as the presence and severity of extragenital diseases, the risk of thromboembolic complications and anesthetic intervention.*

**Key words:** pelvic organ prolapse, quality of life, gynecological surgery.

## БЛИЖАЙШИЕ И ОТДАЛЕННЫЕ РЕЗУЛЬТАТЫ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ПРОЛАПСА ГЕНИТАЛИЙ У ЖЕНЩИН СТАРЧЕСКОГО ВОЗРАСТА

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### ✓ Резюме

*В пожилом возрасте хирургическое вмешательство должно быть наименее инвазивным и направленным в первую очередь на улучшение качества жизни и устранение негативных симптомов. При выборе метода хирургической коррекции пролапса гениталий в этом возрасте необходимо учитывать не только тяжесть и форму основного заболевания, но и наличие сопутствующей внутриматочной патологии, а также наличие и тяжесть экстрагенитальных заболеваний, риск тромбозных осложнений и анестезиологического пособия.*

**Ключевые слова:** старческий возраст, пролапс тазовых органов, экстрагенитальная патология.

## REPRODUKTIV YOSHDAGI AYOLLARDA JINSIY ALOQA PROLAPSINING GENETIK ASPEKTLARI

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✓ *Rezyume*

*Keksalikda jarrohlik aralashuvi eng kam invaziv bo'lishi va birinchi navbatda hayot sifatini yaxshilash va salbiy alomatlarni bartaraf etishga qaratilgan bo'lishi kerak. Ushbu yoshdagi genital prolapsani jarrohlik yo'li bilan tuzatish usulini tanlashda nafaqat asosiy kasallikning og'irligi va shaklini, balki birga keladigan bachadon ichi patologiyaning mavjudligini, shuningdek, ekstragenital kasalliklarning mavjudligi va og'irligini, tromboembolik asoratlar xavfini va anestetik yordamni hisobga olish kerak.*

*Kalit so'zlar: keksalik, tos a'zolarining prolapsasi, ekstragenital kasalliklar.*

### Relevance

The problem of prolapse and loss of internal genital organs is certainly one of the most pressing issues in gynecology at present. Genital prolapse leads to functional insufficiency of various organs and systems with various clinical manifestations and severity. Pelvic organ prolapse (POP) as a multifactorial disease with a syndromic course, different time of manifestation of pathology, with the presence of a genetic predisposition in the formation and progression and is recognized as one of the clinical manifestations of pelvic floor muscle insufficiency [1, 2,14,15,16,17]. The relevance of the problem of genital prolapse is due, in addition to early manifestation, to a high frequency of relapses after surgical treatment. In addition, long-term conservative-expectant tactics of monitoring early uncomplicated forms of genital prolapse in reproductive age contributes to an increase in the incidence of the disease in older patients, which increases the risk of unfavorable treatment outcomes [2,18,19]. It is known that in 85.5% of patients POP is accompanied by urinary incontinence, bowel movement disorders, sexual dysfunction, and dyspareunia [2,20,21]. In this regard, it is absolutely justified that genital prolapse in women is recognized as an interdisciplinary problem all over the world [3, 4, 5, 6, 7, 8, 9]. According to a number of authors, in the structure of gynecological pathology, pelvic floor failure (PFF) accounts for at least 31.4% in the population of women of reproductive age [1, 11,12,13], POP accounts for up to 28% of patients with progression of the disease frequency. Statistical data of foreign authors confirm the wide prevalence of POP in women: in European countries, 30.8% of women suffer from genital prolapse; in the Middle East - up to 49.6%; in North and East Africa, the incidence of POP is 46-56% among gynecological pathology [2, 22]. Age has a decisive influence on the frequency and complexity of this problem. In older patients, genital prolapse reaches its culmination. At the same age, the greatest number of recurrent forms of genital prolapse occurs. In addition, it is in older patients that various somatic diseases reach their peak, which significantly increases the risk of anesthesia and complicates the postoperative period. On the one hand, the complexity of the pathology, on the other - the age of patients and the presence of numerous, sometimes severe extragenital diseases, forces gynecologists to use reliable, but at the same time easily tolerated operations for the treatment of genital prolapse in old and senile age.

The main method of treating genital prolapse, according to the unanimous opinion of urogynecologists around the world, remains surgical correction of the pelvic floor. Until recently, the most common method of correcting pelvic organ prolapse were various types of closure of the defect with local tissues. However, in 1986 in France it was proposed to use synthetic prostheses in gynecology for the correction of genital prolapse. The main advantage of this technique is the formation of an artificial frame instead of destroyed fascia, while both the prevesical and rectovaginal fascia are restored and strengthened.

However, the introduction of mesh prostheses into gynecological practice, in addition to significantly increasing the effectiveness of treatment, also led to the emergence of specific complications associated with the presence of "blind" stages of prosthesis installation. A large number of publications on the complications of this technique, as well as numerous recommendations, led to the refusal of the main manufacturer of prolene prostheses, Ethicon, from further production of these systems, in connection with which a modern understanding and solution to the problem of genital prolapse is required.

However, in world practice there is no truth in the statistics of PTO: firstly, patients with a mild degree of the disease rarely seek medical help, and secondly, there is no system of medical examination of patients with prolapse and prolapse of female genital organs.

**The purpose of the study** to reduce the risk of surgical treatment, postoperative complications and the frequency of recurrence of genital prolapse in elderly women by optimizing preoperative

examination and preparation of patients, as well as individualizing surgical technology and improving postoperative rehabilitation.

### **Material and methods**

To achieve the set goal and solve the problems, a comprehensive examination of 295 patients aged 55 to 72 years was conducted, who underwent surgical treatment for prolapse and prolapse of the internal genital organs in the gynecological clinic of the OPC in the city of Bukhara for the period 2019-2024. The effectiveness of various methods of genital prolapse correction in this cohort of patients was determined depending on the technology used. Group I consisted of 53 patients operated on for severe forms of genital prolapse using synthetic prostheses. Group II included 201 patients with various degrees of prolapse, operated on using classical techniques and their modifications, vaginal access without the use of synthetic materials. Depending on the extent of the surgical intervention, patients in group II were divided into three subgroups: subgroup IIa – 72 patients who underwent anterior colporrhaphy and colpoperineolevatoroplasty; subgroup IIb – 66 patients who underwent vaginal hysterectomy; subgroup IIc – 61 patients who underwent median colporrhaphy (Neugebauer-Lefort operation). Group III included 41 patients with various degrees of prolapse who underwent hysterectomy through abdominal access and vaginopexy with a ligamentous apparatus or a synthetic prosthesis.

### **Results and discussion**

All patients were carefully examined: complaints and anamnesis of the disease, data of gynecological examination and special tests, as well as data of instrumental examination methods were studied in detail. The age of the patients varied from 55 to 72 years. In group I, almost half of the subjects were patients aged 60 to 65 years (47.7%). In group II, a significant number of patients over 70 years old (20.9%) should be noted. In group III, almost two thirds (61%) were women aged 55 to 60 years. No reliable differences in age in the groups were found. When analyzing work activity, it was noted that almost half (46.7%) of the patients were subjected to significant physical exertion. Of course, one of the main factors determining further treatment tactics for patients with genital prolapse is the presence of extragenital pathology. In groups I and II, the most common diseases were cardiovascular diseases: 85.8% in the first group, 89.5% in the second group; varicose veins of the lower extremities - 78.3% of patients in group I, and 81.0% in the second group. In the third group, the number of patients susceptible to these diseases in percentage terms was lower - 70.7% for cardiovascular pathology and 65.9% for varicose veins of the lower extremities. This situation can be explained by the younger average age of patients in the third group in relation to the age of patients from the first and second groups, as well as a smaller sample, which, however, does not affect the representativeness of the group as a whole. Chronic bronchopulmonary diseases were detected in 51.6% of patients in the first group, 51.2% in the second and 31.7% in the third group; chronic gastrointestinal diseases, accompanied by persistent constipation, were observed in 19.5% of the examined patients.

It is also important to note these diseases in the study, as they affect the change in intra-abdominal pressure (its increase), which is one of the factors leading to the occurrence of genital prolapse. The manifestation of systemic connective tissue failure is evidenced by indications of such types of surgical interventions as hernioplasty (9.9% of the total number of patients) and phlebectomy in the anamnesis (14.6% of all patients). More than half of the women we examined (64.7%), in addition to prolapse and prolapse of the internal genital organs, also had concomitant gynecological pathology.

An important role in the development of prolapse and prolapse of the internal genital organs is played by the condition of the connective tissue, which is hereditary. In this regard, we paid special attention to collecting a family history, identifying the presence of genital prolapse and urinary incontinence, as well as hernias in the anamnesis of first-line relatives. More than half of the patients (59.3% of all patients) had a history of genital prolapse in their immediate family members. Almost two thirds of all patients (65.4% in the first group), (60.9%) in the second group, and (87.8%) in the third group) had regular sexual intercourse at the time of examination. Most women (98.4%) had at least one birth in their history. More than two thirds of all patients had two or more births in their history: 205 (80.7%) in the first group, 180 (69.8%) in the second group, and 29 (70.7%) in the third group. No significant differences in the number of births were found in the study groups. In 9.8% of cases, the patients underwent cesarean section. In 90.2% of cases, the patients gave birth vaginally. In case of spontaneous delivery, the nature of delivery, various obstetric aids provided during delivery, and any injuries to the

soft birth canal play a major role in the development of genital prolapse. In 80.2% of cases, obstetric aids were required during delivery, or complications arose that subsequently became one of the causes of prolapse and prolapse of the internal genital organs. Episiotomy or perineotomy was performed during delivery in 18.5% of the first group, 23.6% of the second group, and 14.6% of the third group. In 40.7% of cases, delivery was complicated by perineal rupture of varying degrees. Obstetric forceps were used in 1 case (0.4%) in the first group and in 3 cases (1.2%) in the second group. Large fetuses were delivered in 21% of the first group patients, 35% of the second group patients, and 18% of the third group patients. More than 3.5% of patients in all groups had a newborn weight exceeding 4500 g. A child's weight over 4000 g is also one of the factors in the occurrence of genital prolapse. Analysis of the patient survey allowed us to reveal that the leading complaint at the time of admission was a feeling of a foreign body in the vagina (87.3%). Undoubtedly, this is also associated with a large number of women actively complaining of discomfort during sexual activity (61.1%). Complaints of urinary incontinence during stress (38.2%) and frequent urination (19.7%) were also common. Special attention should be paid to the fact that every fifth patient complained of difficulties with defecation and a feeling of incomplete bowel movement (22.8%).

During examination, the most common signs of pelvic floor muscle failure (94.8%) and vaginal wall prolapse (89.2%) were observed. Cystocele of varying severity was diagnosed in more than half of all cases (50.8%), and rectocele in one fifth of cases (21.2%). Careful examination and functional tests revealed signs of stress urinary incontinence, including its latent forms, in 36.7% of cases. In a quarter of patients, we observed incomplete uterine prolapse (26.4%), and in every fifth patient, complete uterine prolapse (19.5%). The success of surgical treatment of patients with prolapse and prolapse of the internal genital organs depends on a combination of many factors, the leading one being the correct choice of surgical technology in each specific case. We have identified a group of factors that allow us to select the most effective and least risky treatment: age of patients; degree of prolapse of the internal genital organs; presence of concomitant gynecological; presence and severity of extragenital pathology; presence and severity of factors predisposing to relapse of the disease; presence of combined urinary and intestinal dysfunction; sexual activity. In the first group, all patients underwent surgical treatment using prolene (synthetic) prostheses. In 77.6% of cases, surgical treatment was performed in the amount of anterior extraperitoneal colpopexy using synthetic prostheses. 135 of them additionally underwent colpoperineolevatoroplasty. 57 (22.4%) patients underwent posterior extraperitoneal colpopexy using a prolene prosthesis and in all cases supplemented with colpoperineolevatoroplasty. In 14 (5.5%) cases, vaginal extirpation of the uterus was performed in combination with anterior extraperitoneal colpopexy using the Elevate Anterior synthetic prosthesis. Seventy-four patients additionally underwent urethropexy of the middle third of the urethra with a synthetic loop (TVT-O). All patients in subgroup 2a underwent plastic surgery of the anterior vaginal wall with their own tissues and colpoperineolevatoroplasty. In subgroup 2b, 97.6% of patients underwent vaginal hysterectomy and another 4 patients (2.4%) underwent vaginal extirpation of the cervical stump. In all cases in this group, colpoperineolevatoroplasty was also performed, and in 24 patients (14.5%) the operation was supplemented by plastic surgery of the anterior vaginal wall with their own tissues. In subgroup 2c, all patients underwent median colporrhaphy (Neugebauer-Lefort operation) with colpoperineolevatoroplasty.

The results of surgical treatment of all 253 patients were monitored by us for 3 years. The patients were examined 2, 6, 12 months after the operation, then annually.

When analyzing intraoperative complications and complications of the early postoperative period, we found a statistically significant difference in the results obtained between the first and other groups.

In the first group, in one case (0.4%), when placing Prolift Anterior, an intraoperative injury of the bladder guidewire was recorded.

In the second group, there were no intraoperative complications. In subgroup 2b, hematoma of the anterior vaginal wall was detected in 2 cases and hematoma of the vaginal dome in 1 case. Hematomas with a volume of 60, 75 and 90 ml were emptied on the 5-6th day after the operation. In the third group, there were no intraoperative or early postoperative complications. When analyzing the long-term results of treatment of patients with genital prolapse, we relied on the patients' subjective assessment of the surgical treatment performed, their assessment of the quality of their sexual life, vaginal examination data, and ultrasound examination data.

In subgroup 2c, no relapses were noted during the entire observation period after median colporrhaphy. This operation showed maximum efficiency.

Thus, all the methods we presented in the study are effective for correcting prolapse and prolapse of the internal genital organs.

### Conclusion

1. For elderly patients, the comfort operation is median colporrhaphy, as a minimally invasive and virtually relapse-free technology (there were no intra- or postoperative complications, no relapses were detected after three years). The effectiveness of vaginal hysterectomy was 88%.
2. Analysis of the effectiveness of prevention/treatment of pelvic organ prolapse must be accumulated in a single information center, periodically updating research results, including and supplementing with new research methods. Questionnaire materials may undergo changes when a patient moves from one age group to another, and when the risk group changes and the need to be supplemented with new research and treatment methods.

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