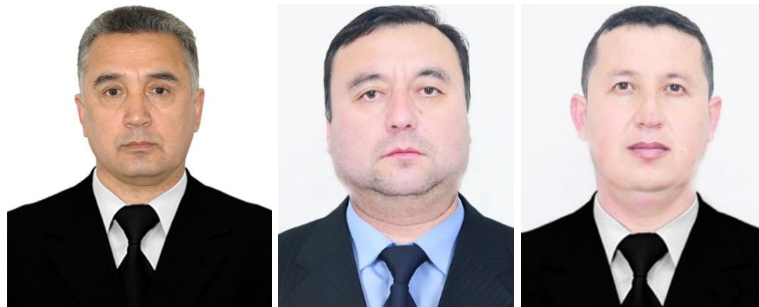


## TACTICS OF TREATMENT OF RECTOVAGINAL FISTULAS



Sherbekov Ulugbek Akhrorovich, Sherkulov Kodir Usmonkulovich, Radjabov Jasur Pardaboevich  
Samarkand State Medical University, Republic of Uzbekistan, Samarkand

### РЕКТОВАГИНАЛ ОҚМАЛАРДА ДАВОЛАШ ТАКТИКА

Шербеков Улуғбек Ахрорович, Шеркулов Қодир Усмонқулович, Раджабов Жасур Пардабоевич  
Самарқанд давлат тиббиёт университети, Ўзбекистон Республикаси, Самарқанд ш.

### ТАКТИКА ЛЕЧЕНИЯ РЕКТОВАГИНАЛЬНЫХ СВИЩЕЙ

Шербеков Улуғбек Ахрорович, Шеркулов Қодир Усмонқулович, Раджабов Жасур Пардабоевич  
Самарқандский государственный медицинский университет, Республика Узбекистан, г. Самарқанд

e-mail: [info@sammu.uz](mailto:info@sammu.uz)

**Резюме.** Мақсад: ректовагинал оқмалар билан оғриган беморларни даволаш натижаларини яхшилаш. Материаллар ва усуллар: ректовагинал оқма билан оғриган 23 беморни жарроҳлик даволаш натижалари баҳоланди. Жарроҳлик аралашувининг икки тоифаси қўлланилди. 11 беморда фистулалар кесилди, сўнгра сфинктеролевавторопластика компонентларини шилатмасдан жарроҳлик ярасини маҳкам ёпиштириши орқали қатлам-қатлам қўйди. Қолган 12 беморда операция сегментар проктопластика, олдинги сфинктеролевавторопластикадан сўнг мобилизацияланган шиллиқ-субмукоз қопқоқ билан қин деворига пластик жарроҳлик амалиёти билан тўлдирилди. Натижалар: беморларнинг биринчи гуруҳида 1 марта касалликнинг қайталаниши қайд этилган. Беморларнинг иккинчи гуруҳида рецидивлар кузатилмади. Хулоса: олдинги сфинктеролевавторопластика билан тўлдирилган ректовагинал оқманинг радикал кесиб олишни қўллаш ректовагинал тўсиқнинг қатламли тузилишини тиклаш орқали операциядан кейинги асоратлар ва касалликнинг қайталаниши сонини камайтиришининг энг истиқболли усули ҳисобланади.

**Калим сўзлар:** ректовагинал оқма, ректовагинал тўсиқ, қайталаниши, олдинги сфинктеролевавторопластика.

**Abstract.** Purpose: to improve the results of treatment of patients with rectovaginal fistulas. Materials and methods: the results of surgical treatment of 23 patients with rectovaginal fistulas were evaluated. Two categories of surgical interventions were applied. 11 patients underwent excision of fistulas followed by layer-by-layer suturing of the surgical wound tightly without the use of sphincterolevatoroplasty components. In the remaining 12 patients, the operation was supplemented by performing segmental proctoplasty, plastic surgery of the vaginal wall with a mobilized mucosubmucosal flap after anterior sphincterolevatoroplasty. Results: 1 recurrence of the disease was registered in the first group of patients. There were no recurrences in the second group of patients. Conclusion: the use of radical excision of the rectovaginal fistula, supplemented by anterior sphincterolevatoroplasty, is the most promising method to reduce the number of postoperative complications and relapses of the disease by restoring the layered structure of the rectovaginal septum.

**Key words:** rectovaginal fistula, rectovaginal septum, recurrence, anterior sphincterolevatoroplasty.

**Introduction.** Rectovaginal fistulas are one of the most difficult and unresolved problems in coloproctology, pelvic surgery, gynecology and urology. Various methods of surgical treatment of rectovaginal fistulas have been proposed. Despite this, the proportion of relapses of the disease and postoperative complications remains high. The main reason for this is the lack of an individual approach to determining the method of surgical treatment of rectovaginal fistulas, which prompts the search for

newer surgical technologies and the development of treatment algorithms.

Of all genital fistulas, the most common (49.3% of cases) are intestinal-genital. The proportion of rectovaginal fistulas is 59.1%. The most common fistulas are low and medium levels. Rectovaginal fistulas are a complex social problem, cause disadaptation, lead to severe moral and physical suffering for the patient, put her in a difficult relationship with her family and others. The considered

pathological conditions can lead to the occurrence of disorders associated with gas and fecal incontinence, often fistulas develop against the background of anorectal chronic pathology, complicated by purulent infection. At the same time, fistulas are characterized by low localization, a labial structure, and cicatricial lesions of the perineal tissues. In such cases, anal sphincter insufficiency often develops. The breakthrough of the abscess in the vagina with acute paraproctitis, complications of inflammatory bowel diseases such as Crohn's disease, diverticular disease, as well as injuries of the rectovaginal septum and surgery on the pelvic organs can also cause the development of rectovaginal fistulas. Involuntary release of feces and gases, their entry into the vagina causes maceration and irritation of the skin of the perianal region and the vaginal mucosa. Additional difficulties in the current situation are introduced by persistent, sometimes unsuccessful treatment of vaginitis, supported by constant contamination with intestinal microflora.

The main reasons for early recurrence are supuration of wounds, the wrong choice of the method of operation, technical difficulties due to the localization of the fistula, destruction, cicatricial transformation and massive damage to the tissues of the perineum. After numerous operations in the rectovaginal septum and perineum, extensive morphological changes are formed, represented by cicatricial deformities. Modern studies have shown the importance of individual choice of the method of surgery for each patient. However, unified and adapted algorithms for choosing surgical tactics, taking into account such factors as the etiology of the fistula, its syntopy, position and course relative to the edge of the anus, perineum, the relationship of the defect or fistulous tract with the muscular apparatus of the rectal sphincter, the severity of the cicatricial periprocess, the functional state of the obturator apparatus of the rectum intestines have not been created to date.

Most authors are trying to create one, universal method for the treatment of all forms of rectovaginal fistulas. In this regard, the optimization of treatment tactics for rectovaginal fistulas remains a very urgent problem of modern proctology. To optimize the surgical treatment of patients with rectovaginal fistulas, it is necessary to clearly define tactical approaches and methods of technical implementation of the stages of the operation, which must be strictly individualized, taking into account the clinical and objective manifestations of the disease. Ongoing research will reduce the number of postoperative relapses and poor treatment outcomes to a minimum.

**The purpose of the study** - to improve the results of treatment of patients with rectovaginal fistulas.

**Materials and methods.** An assessment was made of the immediate and long-term results of sur-

gical treatment of 23 patients with rectovaginal fistulas of varying degrees of complexity, who were treated at the 1st clinic of the SamMI Coloproctology Department from 2016 to 2021. The postoperative monitoring period was at least 6 months. All patients - initially admitted to the SamMI clinic - the dominant etiopathogenetic factor was birth trauma, perineal rupture in childbirth II-III stage with subsequent infection from the lumen of the rectum, in two cases there was spontaneous drainage of acute paraproctitis into the lumen of the vagina. Patients of the studied groups were admitted to the clinic with formed rectovaginal fistulas for radical surgical treatment. Patients, first of all, underwent a gynecological examination, a vaginal examination to exclude concomitant organic pathology and an assessment of the state of the vaginal microflora.

Patients underwent a standard set of objective studies: digital examination of the rectum, vaginal and bimanual examination, which determined the length of the anal canal, the localization of the internal opening, its size, height, the presence of an inflammatory infiltrate, cicatricial deformity of the distal rectum, usually arising from trauma or previous surgical interventions.

The functional status of the internal and external sphincter components was also assessed. The diagnostic algorithm of instrumental research methods included ano- and rectoscopy, anorectal complex manometry and profilometry, fistulography, endorectal and vaginal ultrasound. In the study of complex, recurrent fistulas and the consequences of severe perineal ruptures, proctography, spiral or magnetic resonance imaging (to assess the topography of the fistula and, if necessary, exclude concomitant surgical or oncological pathology) was additionally performed; in case of gross cicatricial deformities, electromyography was performed.

As part of the preoperative period, the patients underwent a standard set of laboratory examinations. The quantitative and qualitative composition of the pathogenic microflora of the vagina and rectum was assessed for the correction of antibiotic therapy in the postoperative period, which was especially taken into account for patients with recurrent rectovaginal fistulas. The preoperative preparation of the patients consisted in the sanitation of the vagina with antiseptics, and, if possible, the sanitation (washing) of the fistulous tract with antiseptic solutions was carried out. Two categories of surgical interventions were applied, which seem to be the most pathogenetically justified. The distribution of patients into groups was carried out taking into account the principles of stratification randomization, including the maximum similarity of the qualitative signs that determine the postoperative prognosis. Thus, the second group of clinical observations (the main group) included only patients who suffered a perineal rupture in childbirth of

the III stage, acute paraproctitis, as well as patients with prolapse and relaxation of the pelvic floor, that is, a cohort of patients with the worst postoperative prognosis when performing standard interventions.

An obligatory component of both groups was radical excision of rectovaginal fistulas. In the control group, nine patients underwent excision of fistulas with suturing of the internal opening in the rectum or closing it with a muco-submucosal flap, followed by layer-by-layer suturing of the surgical wound tightly and plasty of the vaginal wall of its own mucosa without the use of sphincterolevatoroplasty components. In the remaining eight patients (main group), the applied operation was modified by performing segmental proctoplasty of the area of the internal fistula opening in the rectum with a U-shaped displaced full-thickness flap of the intestinal wall, fixed with sutures along the perimeter of the wound of the intestinal wall, and the vaginal wall defect was "covered" with a mobilized mucosal submucosal flap after preliminary anterior sphincterolevatoroplasty (similar to operations for rectocele) with suturing of the anterior portions of the muscles that lift the anus and the creation of a fascio-muscular layer in the rectovaginal septum in the area of the excised fistula.

The use of synthetic plastic materials (polypropylene meshes and alloplastic materials), as described in many domestic and foreign studies, was not used in these groups of patients due to the high proportion of wound suppuration, septic complications arising from the use of plastic materials in chronic purulent infection. Even in the absence of relapses in this category of patients, complications can be gross cicatricial deformities of the perineum, dysfunction of the muscular apparatus of the perineum and pelvic floor, and dyspareunia.

**Results and its discussion.** In the postoperative period, the most favorable conditions for wound healing and rapid recovery of patients were created, namely, the regimen, diet, correction of general and local disorders, dressings. Starting from the first day after surgery, the patients underwent daily dressings, during which the vagina was douched with antiseptic solutions. A comparative analysis of the results of surgical treatment of patients with rectovaginal fistulas was carried out. Among the patients who underwent excision of the fistula with layer-by-layer suturing of the surgical wound tightly and plasty of the vaginal wall of their own mucosa without the use of components of sphincterolevatoroplasty (wound healing time was up to 20 days), 1 recurrence of the disease occurred 1-1.5 months after the operation, associated with the lack of adequate separation between the walls of the vagina and the rectum, infection of the wound, eruption of sutures.

To prevent purulent-septic complications, patients underwent antibiotic therapy, the duration of which in this group of patients ranged from 7 to 10

days. The relief of postoperative moderate pain syndrome, carried out by non-narcotic analgesics, was performed within 3-6 days. In the group of patients who underwent excision of the rectovaginal fistula with segmental proctoplasty, anterior sphincterolevatoroplasty and plastic surgery of the vaginal wall with a mobilized muco-submucosal flap (healing time was up to 15 days), no relapses of the disease were recorded.

However, in one observation after the use of the combined technique, infiltrative inflammation was noted in the postoperative wound with eruption of the sutures, which did not lead to the development of a relapse, stopped by conservative methods within two weeks. The duration of antibiotic therapy was 5-7 days. The relief of pain was carried out up to 6 days, at a later date there was no continuing need for parenteral administration of analgesics.

According to the results of the analyzes, in the standard course of the postoperative period in patients of both groups, there were no data for the presence of significant inflammatory reactions (leukocytosis did not exceed  $9.3 \times 10^9/l$ , the shift of the leukocyte formula to the left was minimal - stab no more than 10%, there was no lymphopenia). The exceptions were observations with relapses and patients with infiltrative changes in the wound in the early postoperative period, which was manifested by moderate leukocytosis. This patient had an increase in temperature to subfebrile numbers. Against the background of the therapy, these manifestations were eliminated within three days. It should be noted that the patient, with later revealed recurrences of rectovaginal fistulas, still had inflammatory shifts in laboratory tests (on the 5th and 7th days after the operation, the maximum leukocytosis was  $12.5 \times 10^9/l$ ). Together with the data of objective physical control, we interpret this as early "harbingers" of relapses, the probable causes of which we consider microabscess formation of infiltrates, suppuration of the hematoma of the rectovaginal septum in the area of surgical wounds, and leakage of rectal sutures.

In the period from 6 to 12 months, 11 patients who underwent excision of the rectovaginal fistula using a modified technique underwent control endorectal ultrasound examinations, which showed a positive dynamics of changes - the absence of diastasis between the levators, the resolution of the inflammatory infiltrate, the thickness of the rectovaginal septum corresponded to normal values.

Thus, as a result of the study, significant advantages and prospects of the proposed method using anterior sphincterolevatoroplasty were determined. The proposed technique allows layer-by-layer restoration of the structure of the rectovaginal septum, preventing the spread of infection from the lumen of the rectum to the rectovaginal septum and into the vagina, thereby being a necessary step in the preven-

tion of postoperative complications and relapses of the disease, as evidenced by the immediate and long-term results of the study.

Reducing the time of postoperative wound healing, the duration of antibiotic therapy, less need for the use of painkillers and anti-inflammatory drugs also show the promise of the proposed method.

**Conclusions.** The conducted studies have shown that the use of the method of radical excision of the rectovaginal fistula, supplemented by segmental proctoplasty, anterior sphincterolevatoroplasty and plastic surgery of the vaginal wall with a mobilized muco-submucosal flap (with its lateral movement) is the most promising method that can significantly reduce the number of postoperative complications and relapses of the disease. The separation of the walls of the rectovaginal septum, the creation of a fascial-muscular layer between them due to the anterior sphincterolevatoroplasty ensures the restoration of the anatomical structures of the perineum and pelvic floor, preventing the spread of the infectious process from the lumen of the rectum to the rectovaginal septum and into the vagina. The stable positive results obtained in the second clinical group emphasize the correctness of the chosen tactics, since these patients initially had the highest risk of complications and postoperative recurrence of the disease.

This method helps to reduce the pain syndrome, restore the functional characteristics of the rectum and its locking apparatus, as evidenced by our immediate and long-term results. The method has a good cosmetic effect. The practical implementation of the developed and pathogenetically substantiated modified surgical technique will reduce the length of stay of patients in the hospital due to early rehabilitation and a decrease in the number of postoperative complications.

Reducing the recurrence of the disease reduces the number of repeated hospitalizations of patients, which emphasizes the social and economic efficiency of the proposed method. Separate surgical techniques during the mobilization of the vaginal wall flap and the plastic stage of the operation need technical analysis and improvement as the material is collected, which requires further research, but even now the advantages of the method are convincing.

#### Literature:

1. Vorobyov G.I. Fundamentals of coloproctology. - M., 2006. - 432s.
2. Van der Hagen S., Baeten C., Soeters P. B., van Gemert W Long-term outcome following mucosal advancement flap for high perianal fistulas and fistulotomy for low perianal fistulas.//Colorectal Dis.-2006. -V 21. - P. 784-790.
3. Musaev Kh.N. Surgical treatment of rectovaginal fistulas. Surgery, 2009.-N 9.-S.55-58.

4. Krasnopolsky V.I., Buyanova S.N., Shchukina N.A. Etiology, diagnosis and basic surgical principles for the treatment of intestinal-genital fistulas // Obstetrician. igin. - 2001.- No. 9. -p.21-23
5. Dodica A.N. Treatment of patients with incomplete internal, colovaginal fistulas, after sphincter-preserving operations on the rectum: Diss\_cand. Med.sci. - M., 1998. - 122p.
6. Ommer A, Herold A., Berg E. S3-Leitlinie: RectovaginalFisteln (ohneM.Crohn) // Coloproctology. - 2012. - Vol. 34. - P. 211 - 246.
7. Holtmann M., Neurath M. Anti-TNF strategies in stenosingandfistulizingCrohn's disease//Colorect. Dis.-2005. -V. 20. -P. 1-8.
8. V. E. Smirnov, P. M. Lavreshin, A. V. Murav'ev, V. K. Gobedzhishvili, and V. I. Linchenko, Russ. Surgical tactics in the treatment of patients with rectovaginal fistulas. //Materials of the All-Russian Conference of Heads of Departments of General Surgery of Universities of the Russian Federation, Rostov-on-Don, 2001.
9. Protsenko V.M. Surgical treatment of colonic-vaginal fistulas: Dis. doctor of medical sciences - M., 1990. - 267s.
10. Shelygin Yu.A., Grateful L.A. reference book on coloproctology. - M.: Litterra, 2012. - 608s.

#### ТАКТИКА ЛЕЧЕНИЯ РЕКТОВАГИНАЛЬНЫХ СВИЩЕЙ

Шербеков У.А., Шеркулов К.У., Раджабов Ж.П.

**Резюме.** Цель: улучшение результатов лечения больных с ректовагинальными свищами. Материалы и методы: проведена оценка результатов хирургического лечения 23 пациенток с ректовагинальными свищами. Применены две категории оперативных вмешательств. 11 пациенткам проведено иссечение свищей с последующим послойным ушиванием операционной раны наглухо без использования компонентов сфинктеролеваторопластики. У остальных 12 пациенток операция дополнена выполнением сегментарной проктопластики, пластики стенки влагалища мобилизованным слизисто-подслизистым лоскутом после выполнения передней сфинктеролеваторопластики. Результаты: в первой группе больных зарегистрировано 1 рецидива заболевания. Во второй группе больных рецидивов отмечено не было. Заключение: использование методики радикального иссечения ректовагинального свища, дополненной передней сфинктеролеваторопластикой, является наиболее перспективным способом, позволяющим уменьшить число послеоперационных осложнений и рецидивов заболевания за счет восстановления послойного строения ректовагинальной перегородки.

**Ключевые слова:** ректовагинальный свищ, ректовагинальная перегородка, рецидив, передняя сфинктеролеваторопластика.