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CLINICAL GUIDELINES
Rectal prolapse (62.2, 62.3), adults

Yuri A. Shelygin[1,9], Sergey I. Achkasov[1,9], Denis V. Alyoshin[1], Oleg M. Biryukov[1], Vitaly S. Groshilin[2], Vladimir N. Kashnikov[1], Ivan V. Kostarev[1], Nikolay V. Kostenko[6], Aleksey I. Moskalev[1], Andrey A. Mudrov[1], Alexander V. Muravyov[5], Natalia V. Oleinik[10], Vadim V. Polovinkin[7], Vil M. Timerbulatov[3], Alexander Yu. Titov[1], Oksana Yu. Fomenko[1], Sergey A. Frolov[1,4], Alexander G. Khitaryan[8]

[1]Ryzhikh National Medical Research Center of Coloproctology (Salyama Adilya st., 2, Moscow, 123423, Russia)
[2]Federal State Budgetary Educational Institution of the Russian Ministry of Health (trans. Nakhichevan, bld. 29, Rostov-on-Don, 344022, Russia)
[3]Bashkir State Medical University (Lenin st., 3, Republic of Bashkortostan, Ufa, 450008, Russia)
[4]Pirogov Russian National Research Medical University (Ostrovityanova st., 1, Moscow, 117321, Russia)
[5]Stavropol City Clinical Hospital No. 2 (Balakireva st., 5, Stavropol, 355018, Russia)
[6]Astrakhan State Medical University (Bakinskaya st., 121, Astrakhan, 414000, Russia)
[7]Scientific Research Institute — Regional Clinical Hospital No. 1 named after Professor S.V. Ochapovsky (May 1 st., 167, Krasnodar, 350086, Russia)
[8]Rostov-on-Don Private healthcare institution Clinical Hospital "Russian Railways-Medicine" (Varfolomeeva st., 92A, Rostov-on-Don, 344011, Russia)
[9]Russian Medical Academy of Continuous Professional Education (Barrikadnaya st., 2/1, bld. 1, Moscow, 125993, Russia)
[10]Belgorod Regional Clinical Hospital of St. Joasaph (Nekrasova st., 8/9, Belgorod, 308007, Russia)

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LIST OF ABBREVIATIONS

ACPR — Association of Coloproctologists of Russia
BF — biofeedback
AC — anal sphincters
GIT — gastrointestinal tract
RP — radiopharmaceutical agent
PPS — perineal prolapse syndrome
ODS — obstructive defecation syndrome
TRUS — transrectal ultrasound
DFD — defecation functional disorder

TERMS AND DEFINITIONS

Perineal prolapse syndrome (PPS) is a set of diseases that occur as a result of the descent or prolapse of the pelvic organs. These diseases can exist as separate nosological forms (rectocele, rectal prolapse, enterocele).

Obstructive defecation syndrome (ODS) is the disorder of rectal emptying caused by anatomical changes in the posterior pelvic floor, such as rectocele, internal invagination and prolapse of the rectum, enterocele and sigmocele in combination with discoordination and/or atrophy of the pelvic floor muscles.

1. BRIEF INFORMATION ON THE DISEASE OR CONDITION (GROUP OF DISEASES OR CONDITIONS)

1.1 Definition

Rectal prolapse is the protrusion or exit of all layers of the rectum outward through the anus [1–3,73].

Internal rectal prolapse is the invagination of the wall of the rectum and/or sigmoid colon without going outside, i.e. the wall of the rectum prolapses into its lumen, but does not descent through the anus [1,4–6,26].

Synonym: internal (intrarectal) invagination of the rectum, rectal intussusceptions.

Anal canal prolapse is the prolapse of the walls of the anal canal through the anus [1–3,12].

Synonym: prolapse of the anus.

1.2 Etiology and pathogenesis

External and internal prolapse of the rectum and prolapse of the anal canal develop due to weakness of the ligamentous-muscular structures of the pelvic organs. These diseases are considered to be nosological forms of perineal prolapse syndrome, which occurs more often in females. Accordingly, prolapse of the rectum of the anal canal is more often in the female half of the population. However, men who have been exposed to characteristic risk factors during their lifetime may develop pelvic floor prolapse with prolapse or internal intussusception of the rectum [1–3,8–12,18,21].

The risk of the disease in women increases with complicated pregnancy and childbirth, including with surgical procedures during delivery, with rapid delivery, perineal ruptures, and with a large fetus [8].

Rectal prolapse can develop as a result of heavy physical exertion or intense sports, and not only accompanied by weight lifting. The influence of these factors is based on an increase in intra-abdominal pressure, as well as sharp vertical loads leading to displacement of the pelvic organs in the sagittal plane [10].

Chronic bowel and lung diseases can be considered the next risk factor provoking pelvic organ prolapse followed by prolapse of the rectum and anal canal. Constipation, provoking frequent and intense straining, persistent cough produces multiple sharp intra-abdominal pressure increase and, as a result, overstretching of the musculofascial structures of the pelvic floor, ensuring the normal position of the organs.

The peculiarities of the constitution of the body and the structure of the rectum, which can cause rectal prolapse, include a large depth of the recto-uterine recess in women and recto-vesicular in men, diastasis of levators, insufficient fixation of the rectum to the sacrum, weakness of the anal sphincter [10–12].

There are three main theories among the pathogenetic mechanisms of rectal prolapse. The first, the so-called 'hernia' theory, describes the mechanism according to which, with an increase in intra-abdominal pressure, the loops of the small intestine move into the Douglas pouch, pushing apart portions of levators and having a direct effect on the pelvic peritoneum and rectum. Under this pressure, the anterior wall of the intestine gradually begins to shift downwards, according to the type of sliding perineal hernia, gradually reaching the anus and, over time, falling out of it [12]. The second theory is invagination.

The primary importance in the genesis of prolapse is given to rectal invagination, which occurs due to weakness of the ligamentous-muscular apparatus, and all other changes ('relaxation of the sphincter, cicatricial degeneration of the intestinal wall') are considered secondary [13,14]. According to the third, neurogenic theory of the genesis of rectal prolapse, prolapse is based on primary lesion of the genital nerve, which leads to pelvic floor prolapse and rectal prolapse [15,16]. In clinical practice, sometimes one has to deal with a combination of different mechanisms of rectal prolapse, and the above theories cannot explain the full variety of cases of prolapse. Therefore, Altmeier W.A. et al. suggested that the theory of sliding hernia and the theory of invagination do not exclude, but complement each other and make a cumulative contribution to the pathogenesis of the disease [17].

1.3 Epidemiology of the disease or condition (groups of diseases or conditions)

Prolapse of the rectum and anal canal accounts for an average of 9% of all coloproctological diseases

or from 0.3% to 5.2% among patients in general surgical hospitals [19,31,91].

Women over the age of 50 are 6 times more likely than men to suffer from prolapse of the rectum and anal canal [8,9,18,19,20]. It is traditionally believed that rectal prolapse is the result of severe multiple births; however, about 1/3 of female patients with this disease have never given birth [2]. The peak incidence occurs in the seventh decade in women's lives, but in men this problem can develop at the age of 40 and earlier. Rectal prolapse, which occurs at a young age, is most often diagnosed against the background of autism, delayed psychomotor development, as well as various mental illnesses requiring long-term use of neuroleptics [21]. In 31% of patients, the disease develops against the background of heavy physical labor [22].

1.4 Features of the coding of the disease or condition (group of diseases or conditions) according to the International Statistical Classification of Diseases and Health-related Problems

Diseases of the digestive system (XI).

Other intestinal diseases (K62).

K62.2 Prolapse of the anus.

K62.3 Rectal prolapse.

62.6 Ulcer of the anus and rectum.

1.5 Classification of the disease or condition (group of diseases or conditions)

Oxford Radiological Classification [23]:

1. High recto-rectal invagination (prolapse remains above the puborectal line).
2. Low recto-rectal invagination (prolapse is at the level of the puborectal line).
3. High recto-anal invagination (prolapse reaches the anal canal).
4. Low recto-anal invagination (prolapse is in the anal canal, but does not go beyond the anal fold).
5. External rectal prolapse.

Classification of the RNMRC of Coloproctology [1,24,63]:

Stages of rectal prolapse:

Stages	Symptoms
1	The rectum protrudes only during defecation
2	The rectum protrudes during defecation and physical exertion
3	The rectum protrudes when walking

Phases of compensation of pelvic floor muscle function [1,24]:

- Compensation phase — the prolapsed rectum reduction by contraction of the pelvic floor muscles;
- Decompensation phase — the rectum reduction is carried out only manually.

The degree of the anal sphincter failure [24,25]:

Degree	Symptoms
1	Incontinence of gases
2	Incontinence of enema waters and liquid feces
3	Incontinence of all components of intestinal contents

Explanations for the Diagnosis Formulation

When formulating a diagnosis, the presence of an external and/or internal component should be reflected, the stage of prolapse with complete prolapse, the phase of compensation for the function of the pelvic floor muscles, as well as the degree of insufficiency of the anal sphincter should be indicated.

Examples of diagnosis formulations:

1. 'Internal rectal prolapse. The fall of the perineum in the phase of compensation for the function of the pelvic floor muscles.'
2. 'Rectal prolapse of 1st degree in the phase of compensation of the pelvic floor muscle function, the anal sphincter failure of 2nd degree.'

1.6 Clinical picture of the disease or condition (group of diseases or conditions)

The main clinical symptom is the presence of prolapse or inversion of the rectum through the anus during the act of defecation, followed by independent or manual correction, mucus discharge from the anus.

Patients with internal intussusception, as a rule, complain of a feeling of incomplete emptying, difficulty in evacuating intestinal contents, a feeling of obstruction at the exit from the rectum, which together constitutes obstructive defecation

syndrome [5,26]. Also, incontinence of intestinal contents (gases, liquid feces) is noted in 50–75% of patients with rectal prolapse [23,27,28].

2. DIAGNOSIS OF THE DISEASE OR CONDITION (GROUP OF DISEASES OR CONDITIONS), MEDICAL INDICATIONS AND CONTRAINDICATIONS TO THE USE OF DIAGNOSTIC METHODS

The necessary and sufficient criteria for the diagnosis of 'rectal prolapse' are the data of a clinical examination, namely, the data of a physical examination, which reveals a complete circular prolapse or inversion of the rectum through the anus during straining or defecation. In the absence of confirmation of rectal prolapse during clinical examination, the diagnosis is established on the basis of objective data from instrumental examination methods, primarily on the basis of defecography [1,13,32,39,40].

2.1 Complaints and anamnesis

With external rectal prolapse, patients complain about the fact that the rectum is turned out through the anus during defecation, physical exertion or transition to an upright position. The rectum that has fallen out is set on its own or requires manual assistance. The fallen part of the rectum can have different shapes, sizes and lengths [29].

With internal rectal prolapse, the following complaints are noted:

- Difficult emptying of the rectum;
- Feeling of incomplete emptying;
- The need for hand pressure on the perineum or insertion of a finger into the lumen of the intestine for emptying;
- Blood discharge during defecation (in the presence of a solitary ulcer or lesion of the mucous layer of the rectum) [1,2,26,30].

All these symptoms are combined into obstructive defecation syndrome.

Approximately 50–75% of patients with rectal prolapse complain of fecal incontinence, and 25–50% of patients complain of constipation [28–31].

When collecting history of the disease, one should pay attention to the number of births, find out the nature of labor (rapid labor, instrumental assistance), occupational hazards (heavy physical exertion), the presence of constipation or chronic lung diseases, i.e. identify factors contributing to the development of rectal prolapse [22,32–34].

It is also extremely important not only to find out how the clinical picture of the disease developed, but also to identify those main factors that could contribute to the development of the disease, assess their severity at the present time, and the possibility of their correction.

The main factors (producing) contributing to the development of prolapse [1–3,8–12,22]:

- Heavy physical activity with increased intra-abdominal pressure;
- Constipation and prolonged straining during defecation;
- The degree of anal incontinence;
- Heredity;
- Unstable stool;
- Pregnancy and childbirth;
- Chronic obstructive pulmonary diseases.

Careful consideration of all history factors is extremely important when choosing a surgical method.

2.2 Physical examination

It is **recommended** that all patients with suspected rectal prolapse undergo an external examination of the perineum and anus and a digital rectal examination [1–3,7,16,18,24,25,30].

Grade of recommendation — C (Level of evidence — 4)

Comment: *Examination of the patient in a gynecological chair allows you to detect rectal prolapse, when all layers of the intestinal wall protrude beyond the anal canal during straining. The protruded portion of the rectum may be in the form of a cylinder or a ball of different lengths and widths. At the same time, during its palpation, in addition to the mucous layer, the muscular layer of the intestinal wall is determined. If rectal prolapse does not occur during examination in the chair, it is necessary to perform a squatting examination. As a rule, rectal prolapse develops in patients with an asthenic body*

Table 1. *Normal defecography parameters [39]*

Condition	The position of the intestine relative to the pubic-coccygeal line (cm)	Time of emptying of the rectum (sec.)	Residual volume (%)
Rest	–2.9 ± 0.9	12.6 ± 4.2	16.5% ± 5.3
Volitional contraction	–1.7 ± 1.2		
Straining	–5.6 ± 1		

type. In addition, there is evidence of the development of this condition in patients with psychoneurotic disorders. In case of internal rectal prolapse, an excessive folding of the intestinal wall is determined by digital examination. It is also possible to identify a spasmodic puborectal muscle that does not relax when strained, thickening and an ulcerative lesion of the rectal wall in solitary ulcer.

2.3 Laboratory diagnostic tests

There is no specific laboratory diagnosis of rectal prolapse. Laboratory diagnostic tests should be done in patients during the planning of surgery to exclude concomitant diseases and conditions, as well as, if necessary, differential diagnosis.

2.4 Instrumental diagnostic tests

Instrumental check-up using endoscopic, radiological and physiological methods makes it possible to determine the severity of perineal descent syndrome, against which rectal prolapse occurs, as well as the presence of concomitant signs of PPS (rectocele, sigmocele, pelvic muscle dissinergia) and the functional state of the large intestine, as well as to exclude other coloproctological diseases [37–39,44,45].

It is **recommended** for all patients with suspected rectal prolapse to undergoanoscopy and rectoromanoscopy [3,25,73].

Grade of recommendation — C (Level of evidence — 4)

Comment: *anoscopy and rectoromanoscopy can reveal excessive mobility of folds, which are embedded in the tube of the rectoscope during straining — a characteristic endoscopic symptom of internal invagination. In addition, it is possible to identify manifestations of solitary ulcer syndrome and various changes in the rectal mucosa. They can be in the form of small areas of infiltration and hyperemia, ulcerative lesions of 0.5–3 cm in diameter, mainly located along the anterior semicircle of the rectum 5–10 cm from the anus, as well as polypoid lesions, sometimes circularly covering the intestinal wall. Polypoid growths on the mucous layer of the rectum, as manifestations of a solitary ulcer, occur in 25% of cases.*

In 18% of patients, areas of mucosal hyperemia are detected, and in 57% of cases there are multiple mixed changes in the rectal wall.

- Defecography is **recommended** for all patients with suspected rectal prolapse [13,32,39,40].

Grade of recommendation — C (Level of evidence — 4)

Comment: *During defecography, the position of the rectum relative to the pubic-coccygeal line is determined at rest, with volitional contraction, the time of its emptying and the residual volume. Defecography data allow us to draw a conclusion about the degree of PPS, to identify internal intussusception of the rectum and concomitant changes such as rectocele, sigmocele and dyssynergia of the pelvic floor muscles (Table 1).*

- It is **recommended** in all patients with suspected rectal prolapse, complaining of prolonged stool delays (more than 3 days), to check the transit time through the gastrointestinal tract using radiopaque or radioisotope markers [41–43].

Grade of recommendation — C (Level of evidence — 4)

Comment: *The total transit time is of great importance for identifying slow-transit constipation, which may be one of the triggers for the development of rectal prolapse. At the same time, after taking the contrast agent through the mouth, daily X-ray monitoring of its passing through the gastrointestinal tract is carried out. The test is carried out against the background of the patient's usual diet, and attention is also paid to the presence or absence*

Table 2. *Standards of indicators of complex sphincterometry [56]*

Parameter	Females	Males
Average resting pressure (mm Hg)	41–63	43–61
Maximum contraction pressure (mm Hg)	110–178	121–227
Average contraction pressure (mm Hg)	88–146	106–190
Pressure gradient during volitional contraction, (mm Hg)	59–115	78–166
Maximum coughing pressure (mm Hg)	76–126	45–175
Minimum pressure during the PUSH test (mm Hg)	28–52	19–43
The percentage of relaxation during the PUSH test	19–40%	20–60%

of a stool during the diagnostic procedure. Normally, the intestine is completely emptied of contrast suspension within 48–72 hours. Transit time of over 72 hours indicates a disorder of intestinal function. In functionally compromised segments, the contrast agent stasis can exceed 96 hours. The interpretation of the passage data on the large intestine should be carried out taking into account the defecography indicators. This makes it possible to determine the functional features of the large intestine — the predominance of slow-transit constipation or evacuation disorders [39,40].

• It is **recommended** that all patients with rectal prolapse undergo a study of the functions of the sphincter (rectal occlusion apparatus) — sphincterometry, and, if technically possible, a pudendal nerves latency test [37,44–47,51,55,57].

Grade of recommendation — C (Level of evidence — 4)

Comment: *Complex sphincterometry is performed to assess the neuroprotective activity of the rectal sphincter and determine the degree of anal incontinence. The test is performed using a calibrated pressure probe inserted into the rectum to a depth of 3.5–4.0 cm, with a fatigue test of the muscles of the external sphincter and pelvic floor muscles, as well as a straining test to exclude DFD. The normal parameters of complex sphincterometry are shown in Table 2.*

A pudendal nerves latency test is performed to assess the somatic innervation of the pelvic floor muscles. It is performed by stimulating the distal branches of the pudendal nerves with a special electrode at the point of their entry into the ischio-rectal fossa at the sciatic spines. Normally, nerves latency it is 2.0 ± 0.2 ms. Patients with increased latency of the genital nerves may have a greater degree of fecal incontinence after surgical correction of prolapse, although no direct correlation between these conditions has been found [46,47,55].

2.5 Other diagnostic tests are not available.

3. TREATMENT, INCLUDING DRUG AND NON-DRUG THERAPY, DIET THERAPY, PAIN RELIEF, MEDICAL INDICATIONS AND CONTRAINDICATIONS TO THE USE OF TREATMENT METHODS

3.1 Conservative treatment

• Conservative treatment is **recommended** for all patients with rectal and anal prolapse to correct constipation [48–50].

Grade of recommendation — A (Level of evidence — 1)

Comment: *The special literature does not contain data on the treatment of rectal and anal prolapse in adults by conservative methods. Conservative treatment is exclusively symptomatic and is aimed at normalizing the motor evacuation function of the large intestine, eliminating or reducing the intensity of pain syndrome, reducing the severity of inflammatory changes in the wall of the rectum, as well as anal incontinence. In patients with severe concomitant diseases, when the risk of surgical treatment exceeds the expected effect of surgery, a number of techniques can be used to reduce the negative effects of prolapse of the rectum and anal canal — manual assistance for defecation, exercises aimed at increasing the tone of the pelvic floor muscles.*

• BF therapy is **recommended** for patients with internal rectal prolapse and DFD [45,51–53].

Grade of recommendation — C (Level of evidence — 5)

Comment: *The purpose of the therapy is to simulate the mode of operation of the pelvic floor muscles necessary for the effective act of defecation. The method is based on the principle of feedback, which consists in providing the patient with audiovisual information about the condition and changes in some of their own physiological processes. In practice, this is implemented in the form of installing sensors in the anal canal, on the skin of the perineum or abdominal press, and displaying data on the condition of muscles from them on a screen in front of the patient's eyes. Depending on the signals received, the patient can change muscle contractions with the help of volitional efforts and improve the function of the pelvic floor muscles. The exercises are performed 15–30 times. The course is 10–15 sessions. According to various data, the effect of BF therapy is noted in 70% of patients with DFD, and in 50% the effect persists in the long-term period [45,51–53].*

3.2 Surgical treatment

The surgical method is the main one in the treatment of rectal prolapse. There are many ways to correct rectal prolapse. Depending on the access, they are divided into perineal and transabdominal surgeries.

The choice of the operation depends on the age of the patient, the presence of severe comorbidities, the state of motor evacuation function of the intestine, the preferences of the surgeon and his experience.

Transabdominal procedures are preferred in patients without severe comorbidities and a low degree of anesthetic risk, whereas perineal surgeries are usually performed in elderly and senile patients with severe comorbidities [59–62,64–82].

3.2.1. Transabdominal procedures

• With a low degree of anesthetic risk, surgical treatment with transabdominal access is **recommended** for patients with rectal prolapse [60–62].
Grade of recommendation — A (Level of evidence — 1)

Comment: *Transabdominal procedures provide better functional results and a low recurrence rate (6–15%) compared to transperineal, which makes them the surgery of choice in the treatment of rectal prolapse [59]. Almost all transabdominal surgeries can be performed both openly and laparoscopically.*

Suture rectopexy — the surgery by Zerenin-Kummel

To the right of the rectum, at the level of the promontorium, the pelvic peritoneum is opened. The incision extends down to the bottom of the Douglas pouch, skirting the gut in front. The rectum is mobilized along the posterior and right lateral semicircles to the levators. Then, starting from the tip of the sacrum, 3–4 sutures are applied distally with a non-absorbable material (polyamide), capturing the longitudinal ligament of the sacrum. With the same sutures, starting from the bottom, the anterior wall of the rectum is stitched. When tying the sutures, the intestine rotates 180° with its fixation to the sacrum. The pelvic peritoneum is sutured above the intestine to create a duplicate in order to eliminate the deep Douglas pouch [63]. According to the literature, the recurrence rate after suture rectopexy ranges from 3% to 14% [24,63]. This technique can cause constipation or exacerbation of existing transit disorders in the long term after surgery in 50% of operated patients [24].

Posterior rectopexy (the surgery by Wells)

The pelvic peritoneum is dissected on both sides of the rectum, exposing the promontorium. The intestine is mobilized along the posterior and lateral semicircles to the level of levators. A polypropylene mesh (8 × 3 cm) is sewn to the sacrum with two sutures using a non-absorbable material (polyamide) in a transverse direction to the axis of the sacrum. The mobilized intestine is placed on the mesh without excessive tension, and the free edges of the mesh are fixed with a non-absorbable material (polyamide) to the side walls of the intestine (2 sutures on each side). The pelvic peritoneum is sutured above the mesh. The recurrence rate after posterior rectopexy is 6–15%, and improvement in retention in the postoperative period occurs in 3–40% of patients [68–70]. The probability of constipation ranges from 19% to 45% [71].

Recto (colpo)sacropexy

After dissection of the pelvic peritoneum to the right of the rectum, it is mobilized along the anterior and right lateral semicircles to the lateral ligament. In men, the intestine is mobilized along the anterior semicircle to the border of the middle and lower rectum. In women with additional rectocele, the surgery is performed with splitting of the rectovaginal septum and mobilization of the anterior wall of the intestine to the anal sphincter. Polypropylene mesh (10 × 3 cm) is sewn with three or four non-absorbable sutures (polyamide) to the entire surface of the mobilized anterior wall of the rectum. In women, the posterior arch of the vagina is fixed with two additional stitches to the mesh. Then the free end of the mesh is attached to the periosteum of the 1st sacral vertebra with two non-absorbable sutures (polyamide), and the procedure is completed by suturing the pelvic peritoneum over the mesh. Recurrence rate after recto (colpo)sacropexy is 3–15%, and the average rate of postoperative complications is 23%. The occurrence or increase in the severity of constipation in the postoperative period was noted only in 14.4% of patients [64–67].

3.2.2. Perineal procedures

It is **recommended** that in case of rectal prolapse in elderly and senile patients with severe comorbidities and conditions, to perform operations with perineal access [25,74–83].

Grade of recommendation — B (Level of evidence — 2)

Comment:

The Delorme's procedure

Transanally, 2 cm up from the dentate line, the mucous layer of the rectum is circularly dissected. The latter is acutely separated from the muscle layer of the protruded part of the intestine and cut off. Four or five vertical stitches are applied to the muscular wall of the rectum to create a muscle roller, and then the integrity of the mucous layer is restored. The positive side of this surgery is the less injury rate. However, a recurrence rate after this method is higher than with transabdominal surgery, and is 4–38% [75,76]. Inflammatory complications, urinary retention, bleeding and constipation occur in the postoperative period in 4–12% of cases [74,77].

Perineal rectal resection (Altmeier's procedure)

A circular incision of the entire thickness of the rectal wall is made 2 cm above the dentate line. Transanally, the rectum and distal sigmoid are mobilized with ligation of blood vessels in maximum proximity to the intestinal wall to a level at which further intestinal prolapse is impossible. After crossing the colon and removing the specimen, an anastomosis is applied with a manual suture or with the help of a stitching device.

With low injury of this surgery, the complication rate reaches 10–12%, including bleeding from the suture line, pelvic abscesses and anastomosis leakage [78]. The recurrence rate ranges from 16% to 30% [2,20,79,80]. A number of surgeons perform levatoroplasty in addition to rectosigmoidectomy. There are reports in the literature that the use of levatoroplasty reduces the recurrence rate to 7% [81,82].

Transanalproctoplasty (Longo procedure)

The operation is performed in patients with internal rectal prolapse, not complicated by a solitary ulcer.

When performing this surgery, two special circular stitching devices are used. An anoscope is inserted into the anal canal, the invaginated wall of the rectum is identified. Then two muco-muscular semi-sutures are applied to the anterior semicircle of the rectum (vicryl on a 5/8 needle), capturing the invaginate. The distance between the sutures is 1–2 cm, depending on the severity of the prolapse. After inserting the head of the device into the rectum, stitches are tied on it and excess tissues are resected using a circular stapler. They do the same with the back wall.

The incidence of complications after the Longo procedure varies from 15% to 37% [83–87]. The imperative urge to defecate is most common (40%), but after a year it persists in only 10% of patients [88]. According to the literature, good functional treatment results in the first months after surgery reach 90%, but after 18 months, recurrent symptoms are noted in 52% of patients [89,90].

4. MEDICAL REHABILITATION AND SANATORIUM AND RESORT TREATMENT, MEDICAL INDICATIONS AND CONTRAINDICATIONS TO THE USE OF MEDICAL REHABILITATION METHODS

4.1 Rehabilitation

• Rehabilitation measures are **recommended** for all patients who have undergone surgery for rectal prolapse [25,91].

Grade of recommendation — C (Level of evidence — 5)

Comment: *General principles of rehabilitation after surgical treatment of rectal prolapse:*

1. Comprehensive assessment of the patient's initial condition and formulation of the rehabilitation program;

2. Drawing up a plan of diagnostic and therapeutic measures necessary for rehabilitation;

3. Multidisciplinary principle of organization of rehabilitation care;

4. Monitoring the effectiveness of the therapy during the rehabilitation treatment and at the end of the rehabilitation course.

Stages of rehabilitation of patients after surgical treatment:

The 1st stage is early rehabilitation, from 2 to 7 days after surgery. During this period, the patient is hospitalized for 3–5 days. At this stage, hemostasis, wound process (including infectious and inflammatory complications) and relief of postoperative pain syndrome are monitored. Stage 2: for 21 days on an outpatient basis, subject to the medical and wellness regime. It is also important to control physical activity, which helps to accelerate reparative processes and healing of postoperative wounds. Therapeutic nutrition is one of the important components of postoperative rehabilitation at an early stage and helps to normalize the function of the gastrointestinal tract, eliminate constipation and normal stool consistency. To this end, patients are recommended to consume an adequate amount of liquid and dietary fibers with high water retention capacity, which allows them to soften the consistency of the stool and restore full-fledged defecation, excluding the need for straining to empty the rectum.

The 3rd stage from 30–45 days after the surgery is carried out by a multidisciplinary team, including a coloproctologist, a gastroenterologist and a functional diagnostics doctor. The essence of the rehabilitation process at this stage is the dynamic control over the general (somatic and psychoemotional) condition of the patient. A complex of diagnostic and therapeutic measures is being carried out aimed at correcting disorders of the motor evacuation function of the large intestine, monitoring physical activity. This stage is aimed at regulating the function and strengthening the pelvic floor muscles (the Kegel gymnastics), and continuing to eat a sufficient amount of liquid and dietary fiber. In patients with a dissynergic reaction of the pelvic floor muscles, BF therapy is performed.

If there is insufficient effect from the treatment, the course is repeated after 3 months. Also, BF therapy and tibial neurostimulation are prescribed in repeated courses in the presence of symptoms of anal incontinence. Follow-up examinations are carried out in 1, 3, 6 months after surgical treatment. The results are evaluated using quality of life questionnaires and a scale of evacuation disorders. In addition, an instrumental examination is necessary in 6, 12, 24, 36 months after surgery for an objective assessment of the anatomical and functional state of the pelvic organs.

5. PROPHYLAXIS AND DISPENSARY OBSERVATION, MEDICAL INDICATIONS AND CONTRAINDICATIONS TO THE USE OF PREVENTIVE METHODS

5.1 Prophylaxis

Prevention of rectal prolapse consists in eliminating risk factors for the development of the disease: increased intra-abdominal pressure during severe physical exertion, constipation, chronic lung diseases, effective treatment of complications after childbirth, adequate implementation of obstetric and gynecological manuals.

As a primary prevention of recurrence of the disease, with signs of functional disorders of the large intestine (constipation), conservative therapy is prescribed before surgical treatment, aimed at selecting a diet with the inclusion of high-fiber foods and a large amount of liquid in the diet. In cases where intestinal function cannot be improved with the help of a diet, laxatives and gastrointestinal motility stimulants should be used. In addition, the functional state of the pelvic floor muscles and anal retention is assessed.

5.2 Dispensary observation

Dynamic follow-up by a coloproctologist is **recommended** for patients who have undergone surgical treatment for rectal prolapse [1,25].

Grade of recommendation — C (Level of evidence — 5)

Comment: *All patients who have undergone surgical treatment for rectal prolapse need the dynamic supervision by a coloproctologist during the first year (once every 6 months). Subsequently, this category of patients requires follow-up examinations once a year to monitor the condition of the pelvic floor muscles and pelvic organ function [1,25].*

6. ORGANIZATION OF MEDICAL CARE

Medical care, with the exception of medical care within the framework of clinical testing, in accordance with Federal Law No. 323-FZ of 11/21/2011 (ed. dated 12/28/2022) 'On the basics of public Health care in the Russian Federation', Decree of the Government of the Russian Federation dated 11/17/2021 No. 1968 'On Approval of the Rules for the Phased Transition of Medical organizations to Medical care based on clinical recommendations developed and approved in accordance with Parts 3, 4, 6–9 and 11 of Article 37 of the Federal Law 'On the basics of public Health care in the Russian Federation' is organized and provided:

1) in accordance with the regulations on the organization of medical care by type of medical care, which is approved by the authorized federal executive authority;
2) in accordance with the procedures for providing assistance in the 'coloproctology' profile, which is mandatory for all medical organizations in the territory of the Russian Federation;
3) based on the present clinical recommendations;
4) taking into account the standards of medical care approved by the authorized federal executive authority.

Hospitalization of patients with rectal prolapse is carried out as planned in order to perform surgery. The treatment of patients in this category is carried out in a specialized coloproctological hospital. Medical care for patients with rectal prolapse is provided by coloproctologists.

Indication for hospitalization:

- Confirmed diagnosis of rectal prolapse and/or anal prolapse and/or internal intussusception of the rectum.

Indications for the patient's discharge:

- With sustained improvement, when the patient can continue treatment on an outpatient basis without compromising his health under the supervision by a coloproctologist
- In the absence of indications for further treatment in the hospital
- If necessary, transfer the patient to another medical institution
- At the request of the patient or his legal representative
- In cases of non-compliance with the patient's prescriptions or internal regulations of the hospital, if this does not threaten the patient's life and the health of others.

7. ADDITIONAL INFORMATION (INCLUDING FACTORS AFFECTING THE OUTCOME OF THE DISEASE OR CONDITION)

Negatively affect the outcome of treatment:

1. The addition of infectious complications.
2. Disorder of the stool (diarrhea or constipation).
3. The patient's failure to comply with restrictions on physical activity and physical exertion.

CRITERIA FOR ASSESSING THE QUALITY OF MEDICAL CARE

Criteria for assessing the quality of primary health care for adults with external and internal rectal prolapse and anal canal prolapse

№ п/п	Quality assessment criteria	Assessment of the implementation
1	An appointment (examination, consultation) by a coloproctologist/surgeon was performed	Yes/No
2	A visual assessment for pathology of the sigmoid and rectum (at diagnosis) was performed	Yes/No
3	A transrectal digital examination of the rectum was performed	Yes/No

Criteria for assessing the quality of specialized medical care for adults with external and internal rectal prolapse and anal canal prolapse

№ п/п	Quality assessment criteria	Assessment of the implementation
1.	Transrectal digital examination was performed (at diagnosis)	Yes/No
2.	Anoscopy and proctoscopy were performed	Yes/No
3.	Defecography was performed	Yes/No
4.	Sphincterometry was performed	Yes/No
5.	Operation for external and/or internal rectal prolapse and/or anal canal prolapse was performed	Yes/No

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