

Rectal Prolapse is the Falling out of the Tissue of the Large Intestine

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Citation: Siniša Franjić. Rectal Prolapse is the Falling out of the Tissue of the Large Intestine. *Arch Clin Case Rep Rev.* 2026; 1(1), 01-05.

Received Date: 10 June 2026

Accepted Date: 16 June 2026

Published Date: 10 July 2026

Abstract

Rectal prolapse refers to the displacement of the large intestine's tissue, specifically the last section of the digestive system, outside the body via the anal opening. In adults, the development of rectal prolapse occurs due to the deterioration of the anal sphincter or the supportive ligaments that maintain the rectum in its proper location. Such deterioration can result from aging, medical conditions, or infrequently, surgical damage. Increased intestinal contractions, prolonged use of laxatives, or acute diarrhea can also lead to prolapse.

Keywords: Rectal Prolapse, Symptoms, Woman, Surgery, Health

Introduction

Rectal prolapse, also termed procidentia, is characterized by a circular, full-thickness bulging of the rectal wall through the anus [1]. It is estimated that about 1% of individuals aged 65 and older experience rectal prolapse, with approximately 3% of women in the United States exhibiting some type of pelvic organ prolapse, which includes rectal prolapse, cystocele, uterine prolapse, or multi-organ prolapse. Women over 50 years old are six times more prone to experiencing rectal prolapse in comparison to men. Contributing factors to this condition include pelvic floor muscle laxity, abnormal fixations of the rectum, a deeper pouch of Douglas, excessive sigmoid redundancy, pudendal nerve dysfunction, and weakness in either the internal or external sphincters.

Rectal prolapse, or procidentia, is a disorder of the pelvic floor that is commonly found in older women who have given birth but can affect individuals of any gender and age group [2]. This condition can severely impact day-to-day life, leading to local symptoms such as mucus leakage, bleeding, discomfort, and sensations of pressure in the rectal and pelvic areas. It may also cause bowel issues, including irregular bowel movements, incomplete bowel emptying, urgent bowel urges, fecal incontinence, and constipation related to outlet dysfunction, ultimately diminishing the quality of life.

Surgery remains the primary method for addressing rectal prolapse and can be carried out through either a transabdominal or a perineal technique. Surgical approaches via the abdomen may result in lower rates of recurrence compared to perineal methods and can also correct a concurrent pelvic organ prolapse. These procedures should be considered for patients who are in good physical condition. Abdominal surgeries typically involve either a posterior or anterior rectopexy, utilizing sutures or mesh. Posterior rectopexy has the potential to worsen or induce constipation, possibly due to nerve damage from the posterior mobilization of the rectum or the angulation of an excess sigmoid colon. Incorporating sigmoid resection with posterior suture rectopexy, known as the Frykman-Goldberg procedure, reduces the likelihood of constipation after surgery and is suitable for patients complaining of this issue before surgery, especially those with a redundant sigmoid colon, despite the possibility of anastomotic leaks.

Types

Rectal prolapse can be categorized into three types [3]:

1. Internal: The patient reports a bulging sensation, but no protrusion is identified upon examination.
2. Partial: The anus is inverted; the rectal mucosa extends 1 to 3 cm beyond the rectal sphincter.
3. Complete: All layers of the rectum have invaginated through the anus (this is uncommon in adults, more frequent in children and the elderly).

Symptoms

Due to the common association of any anorectal symptom with hemorrhoids, most patients describe their condition as “hemorrhoids,” or have been informed they are experiencing “hemorrhoids.” [4].

Patients experiencing rectal bleeding necessitate thorough assessments using both anoscopy and flexible endoscopy to exclude any proximal issues such as colitis, polyps, or malignancy. For individuals under 40 years old without a family history of colon cancer, anoscopy and flexible sigmoidoscopy are appropriate options. Those aged between 40 and 50 years with rectal bleeding should be assessed using either anoscopy and flexible sigmoidoscopy or colonoscopy, although colonoscopy is generally preferred for the majority. Individuals over 50 years with rectal bleeding must undergo evaluation through anoscopy and colonoscopy. Ultimately, patients possessing a notable family history of colon cancer should have both anoscopy and colonoscopy performed, irrespective of their age. Therefore, it is crucial to assess the entirety of the colon in most cases of rectal bleeding to eliminate the possibility of cancer.

Surgeons must distinguish between hemorrhoidal prolapse and true rectal prolapse in patients exhibiting symptoms of prolapse. Hemorrhoidal prolapse occurs when hemorrhoids protrude from one or more typical hemorrhoid sites, which include the right anterior, right posterior, and/or left lateral positions. When hemorrhoids prolapse in these particular areas, the examiner observes protruding mucosa and the underlying hemorrhoidal vessels while noting radial folds that separate the different prolapsing hemorrhoids. Conversely, true rectal prolapse involves a circumferential protrusion of mucosa along with the full thickness of the rectal wall, leading to concentric folds. Patients suffering from complete rectal prolapse typically display reduced sphincter tone, whereas those with hemorrhoidal prolapse generally have normal or elevated sphincter tone.

Rectal prolapse predominantly affects women in their fifties to seventies [5]. This population is also likely to experience urinary incontinence, urgency, pelvic pressure, fecal urgency, irregular bowel habits, and difficulty with complete defecation. This group of symptoms is often linked to multicompartiment pelvic organ prolapse. At times, pelvic organ prolapse might involve visible laxity in one or more compartments during a resting examination. However, in most cases, laxity within one or more pelvic compartments may not be apparent during examination, making pelvic floor testing essential for determining the level of pelvic floor laxity. Investigative procedures like defecography, anal manometry, and urodynamics can help pinpoint weak areas that lead to the patient's collection of symptoms. Comprehensive identification of dysfunctional laxity points may necessitate collaboration across multiple disciplines for evaluation and treatment. Overlooking dysfunctional laxity in one compartment while addressing another could jeopardize the repair or worsen dysfunction in the untreated

area. The rising interest in a multidisciplinary approach for evaluating and treating pelvic organ prolapse has likely contributed to the more frequent use of robotic techniques, as the configuration of port sites and instruments can be more readily shared among specialists than with laparoscopic methods.

VMR (ventral mesh rectopexy) has gained recognition as one of the most frequently executed and highly effective surgical procedures for addressing rectal prolapse. This technique aims to enhance the integrity of the tissue within the rectovaginal septum. In women, the anterior rectum and posterior vagina are very flexible during the process of defecation. In contrast, men naturally possess stability along the anterior rectal wall due to the presence of the prostate. For women who maintain normal coordination of the pelvic floor, an initial sign of structural looseness may be the ballooning of the anterior rectal wall into a significant rectocele during defecation, which can lead to the internal intussusception of the anterior rectal wall and subsequent prolapse. Likewise, decreased support of the uterus may lead to the uterus, cervix, and/or bladder being positioned more posteriorly and inferiorly than usual. This abnormal positioning increases pressure and stress on the anterior rectal wall, contributing to rectal intussusception and prolapse as well. Ultimately, the only pelvic structures in females that remain consistently robust with age are the pubic and tailbones. As pelvic organs become lax with age and connective tissue strength declines, surgical interventions that impart new strength and structural support to the most vulnerable areas are necessary. VMR effectively strengthens the anterior rectal wall and posterior vagina. When performed alongside sacrocolpopexy, this procedure can provide enhanced support within the pelvic region.

Unfortunately, the variety of symptoms associated with pelvic organ prolapse are vague and can be linked to other pelvic floor issues. Therefore, it is essential to ascertain the root cause of the symptoms through examination and testing. Misidentifying the actual cause of symptoms and improper patient selection for surgery can lead to unfavorable results and complications. For instance, obstructive defecation due to pelvic floor tension and lack of proper muscle coordination results in inadequate relaxation during Valsalva, resulting in symptoms such as incomplete defecation, overflow leakage, and urgency. All these symptoms can resemble those of internal prolapse. However, placing mesh in a patient suffering from significant pelvic tension and poor coordination will exacerbate stiffness and hinder pelvic movement.

Mass

The rectum that has prolapsed creates a lengthy tubular mass that protrudes symmetrically through the anus [6]. The visible mucosa appears red and is arranged in circumferential concentric folds surrounding a central opening, which serves as the rectal lumen.

At times, it may be required to ask the patient to exert themselves to induce the prolapse. The diagnosis is confirmed through visual inspection and could be overlooked if this crucial action is not performed.

The length of the prolapse may reach up to 20 centimeters. The bowel is not sensitive and can be manipulated without causing the patient pain.

Inspect the area where the mass connects with the anal canal. If the lump is a rectal prolapse, the covering mucosa and anal skin will be continuous. In the case of an intussusception (which is extremely rare), there would be a separation between the lump's mucosal covering and the anal skin. Inserting a finger into this space will allow access through the anal canal and into the rectum alongside the intussusception.

Intussusception involving the sigmoid colon and upper rectum in adults takes place when a polyp or cancerous growth acts as the leading point of the intussusception. The lesion causing the condition will be observable at the top of the bulge.

Exam

Rectal prolapse typically emerges as a bulge in the rectal area, along with mucus discharge from the rectum, tenesmus, rectal hemorrhage, fecal incontinence, or challenges with constipation [1]. Rectal prolapse may present both internally and externally. The presence of a solitary rectal ulcer could indicate damage to the mucosa due to the pressure of the prolapsed rectal tissue against the front wall of the anal canal. Upon examination, the tissues that are prolapsed externally appear as circular folds that extend out from the anal canal, while internal rectal prolapse can be seen through anoscopy. A clinical examination or photographic assessment typically confirms the diagnosis, and a colonoscopy could be advised for cancer screening or to detect inflammation in the proximal colon that might need treatment. If prolapse is suspected but not physically detected during examination, dynamic defecography may assist in its identification and evaluation.

External rectal prolapse may occur during bowel movements or activities such as Valsalva, which includes walking, exercising, or urinating. Nevertheless, for those with weakened pelvic support, the rectum may prolapse while standing and can remain everted. The pain and pressure associated with the prolapse can restrict movement and further harm the vulnerable elderly population. Unlike pelvic organ prolapse that can utilize a pessary inserted vaginally for addressing uterine or bladder prolapse, there is no matching device available for rectal prolapse. Surgical intervention is the primary treatment for symptomatic external rectal prolapse, with the objective of restoring pelvic structure and remedying functional issues without inducing new bowel dysfunction. Preoperative assessments should encompass checks for anterior compartment prolapse, including indicators of urinary incontinence or vaginal/

uterine prolapse. A collaborative surgical strategy is favored in cases of multi-organ prolapse.

Decision-making

In making decisions about the surgical method and technique, various factors including the patient's characteristics, the surgeon's experience, and details relating to the type of prolapse come into play [1]. A body mass index (BMI) greater than 30, a lack of physical activity, smoking habits, inadequate nutrition, and substance misuse correlate with an increased risk of complications. For women experiencing multicompartiment prolapse who are undergoing rectal and vaginal or anti-incontinence surgeries, the surgery duration may be significantly extended compared to a procedure focused solely on rectal prolapse, which should also be factored into the surgical planning. Previous abdominal or pelvic surgeries, as well as past rectal prolapse repairs, could affect the choice of repair technique to prevent bowel ischemic complications, and opting for a perineal approach may be preferred to evade a problematic abdomen. Patients on anticoagulants or antiplatelet medications may face a heightened risk of bleeding, and these medications should be discontinued at least three days before the operation. Safety measures like type and screen for potential blood availability should be prepared for the surgical timeframe in case of any intraoperative or postoperative bleeding. Lastly, if there is consideration of using synthetic mesh or biological grafts, this matter must be discussed with the patient and consent obtained before the operation.

Initial Approach

In the realm of preoperative assessment, it is evident that not every facet of patient management necessitates a prospective, randomized trial to identify the optimal course of action [7]. Similar to any medical condition, the first step in addressing a patient involves a thorough history and physical examination. Despite the absence of robust Level I evidence, there is a universal consensus on the importance of conducting a comprehensive history and physical examination before proceeding with the surgical correction of rectal prolapse. Moreover, rectal prolapse frequently coexists with undiagnosed pelvic floor disorders, which could be relevant to the symptoms or may need to be managed during surgery, thereby underscoring the need for an extensive preoperative evaluation. Nevertheless, the term "comprehensive" does not imply that it includes every possible aspect, highlighting the core principle of this discussion.

The precise significance and advantages of supplementary investigations are still subject to debate. Many experts recommend colonoscopy before surgical intervention to investigate neoplasia, solitary rectal ulcer, or anastomotic stricture in patients who have previously undergone resection. However, the advantages of endoscopy specifically for those with rectal prolapse are not clearly established. Drawing upon screening guidelines for colorectal cancer suggests that endoscopic examination in individuals at risk for cancer is strongly supported by evidence. It seldom

offers insights that might influence management concerning rectal prolapse. There are indeed case reports documenting colorectal cancer manifesting as rectal prolapse, but these cases involve patients already recognized as at risk and should undergo appropriate screening irrespective of their atypical presentation.

Surgery

Surgical intervention is warranted for individuals with complete rectal prolapse [4]. The surgical approaches can be categorized into abdominal and perineal techniques, which are determined by the patient's age and existing health conditions, along with the surgeon's preferences and expertise. Perineal techniques typically lead to shorter hospital stays and reduced perioperative complications and pain; however, they tend to have higher rates of recurrence.

The three most commonly employed abdominal procedures are rectopexy, resection rectopexy, and mesh rectopexy. A fundamental aspect of each of these techniques is the posterior mobilization of the rectum to align it with the levator muscles. The rectum is elevated from the deep pelvic cavity and attached to the presacral fascia at the sacral promontory level. The lateral ligaments are maintained, as this has been found to lessen postoperative constipation. If there is significant excess length or a prolonged history of constipation, a sigmoid resection with a tension-free anastomosis to the rectum is performed. Mesh can also be utilized to secure the rectum to the presacral fascia, ideally performed without a concurrent resection. Potential complications may include bowel obstruction, mesh erosion, and fistula formation. All these abdominal procedures can be conducted laparoscopically with comparable outcomes, while still providing the advantages of a minimally invasive approach.

Perineal proctosigmoidectomy, which is often referred to as the Altemeier procedure, integrates a perineal proctosigmoidectomy with a front levatoroplasty. A complete circumferential incision is executed 1 cm above the dentate line. The mesentery connected to the rectum and sigmoid colon is gradually cut until all excess bowel tissue is removed. The colon is severed at this junction, and an anastomosis is established between the colon and anal canal using either sutures or a circular stapler. Additionally, an anterior levatoroplasty is typically performed to address the looseness in the levator muscles that frequently accompanies this condition.

Procedure

An ideal surgical intervention for a full-thickness rectal prolapse should be one that ensures minimal complications, enhances postoperative functionality, and maintains a low risk of recurrence over a long duration [7]. It is unsurprising, given the variety of surgical methods for addressing prolapse, to find the absence of a singular, standard solution. Consequently, when evaluating which procedure yields better results, it is crucial to concentrate on the particular endpoint being examined, whether that be morbidity,

mortality, functionality, or recurrence.

Typically, perineal surgeries have been targeted towards older individuals and those with additional health issues who are likely to reap the most benefits from a procedure associated with lower complexity, shorter hospital stays, and quicker recovery times. Unfortunately, repairs performed via the perineal route tend to be less robust compared to those done abdominally, with recurrence rates reported between 5 and 40 percent, influenced by the specific type of procedure and duration of follow-up. This may be particularly significant for younger patients who may potentially outlast their repairs. Other considerations contribute to the choice of the most suitable method that may not be covered in published research, such as younger males wishing to lessen the likelihood of sexual dysfunction due to nerve damage that may occur during abdominal dissections, compared to the higher recurrence risk associated with perineal techniques.

Nevertheless, it is a widely acknowledged fact that the rates of recurrence following an abdominal repair (0–10%) are lower than those seen after a perineal approach. Regardless of the initial procedure, most recurrences are observed between one to three years after surgery, with up to one-third occurring within the initial seven months. Although the reasons behind recurrence are not fully understood, possible contributing factors include the severing of lateral ligaments during abdominal procedures, technical mistakes during rectopexy or mesh insertion, an ambiguous resection endpoint with perineal resections, insufficient mucosectomy during Delorme's technique, and failing to address other concurrent pelvic floor issues. Additional risk factors cited include the presence of psychiatric conditions, being male, advancing age, and elevated body mass index.

Repair

For individuals who are not frail, it is advisable to use abdominal methods for correcting rectal prolapse as these techniques are believed to be more effective, exhibiting lower rates of recurrence (between 8% and 15%) when compared to perineal repairs (with recurrence rates between 20% and 40%) [1]. Rectopexy is a procedure that may involve varying levels of the rectum's mobilization and might include dissection of the rectal attachments either posteriorly, anteriorly, or laterally, along with securing it to the anterior lateral ligament of the sacrum. Options for fixation include utilizing the rectal mesentery or lateral rectal connections, such as in suture rectopexy (SR), or the use of mesh can be added either posteriorly (Well's rectopexy) or anteriorly (ventral mesh rectopexy (VR)) to provide extra stability. In specific situations like diverticulitis or uncontrolled constipation, rectopexy may be accompanied by sigmoid resection along with primary anastomosis. For patients wishing to avoid using mesh, suture rectopexy is utilized, while those suffering from uncontrolled constipation or diverticulitis may receive resection rectopexy.

Laparotomy

In the context of abdominal procedures for rectal prolapse,

minimally invasive methods are favored over open laparotomy [1]. Laparoscopic approaches typically lead to fewer complications overall, shorter hospital stays, better pain management, and faster resumption of normal bowel function. Robotic surgery also shows advantages such as reduced blood loss, enhanced visibility, and lower morbidity rates. The robotic system's capacity to operate and suture within the confined spaces of the pelvis, while providing improved visibility of the hypogastric area and minimizing the risk of injuries, renders robotic methods ideal for rectopexy. However, the risks associated with minimally invasive surgery include potential port site hematomas, hernias, wound infections, and the risk of unintended enterotomy.

The most prevalent minor complications arising from rectopexy are varied and, similar to risks associated with general surgical procedures, include ileus, wound infection, pneumonia acquired in the hospital, respiratory failure, small bowel obstruction (SBO), or incisional hernias. The probability of encountering any of these complications following rectopexy is estimated to be between 0.5 and 6%. It is crucial to monitor bowel functionality, the ability to tolerate oral intake, cardiopulmonary status, and the presence of fever in the postoperative phase to facilitate the timely identification of these frequent complications.

Complications related to port sites such as hernias and hematomas constitute 0.5–2% of the complications that occur postoperatively after laparoscopic and robotic repairs. These issues are frequently identified through a physical examination of the abdominal wall to check for masses, palpating for defects in the fascia, or signs of bowel obstruction. Imaging studies can further clarify the dimensions and involved structures of hernias or hematomas. Swift identification of a patient exhibiting partial obstructive symptoms and showing a bulge or mass during an abdominal examination is essential, as a port site hernia might necessitate a return to the operating room, thereby preventing delays in treatment that could result in bowel ischemia, gangrene, or the need for bowel resection. In our case series, we document two instances of incarcerated hernia discovered one week after robotic rectopexy at the 8-mm port site. For individuals who have previously undergone abdominal operations, gaining access to the abdomen can pose difficulties, and there's a heightened chance of causing either an enterotomy or colotomy, making it advisable to proceed with direct visualization. If an enterotomy goes unacknowledged and not addressed, it can result in severe consequences.

Conclusion

A variety of elements can lead to rectal prolapse. It may develop from chronic straining habits or occur following an arduous childbirth experience. Some individuals may possess a hereditary inclination towards this condition. Additionally, the aging process, along with the deterioration of the anal sphincter muscle, can contribute to this situation. Signs of rectal prolapse include the secretion of mucus or blood, discomfort during defecation, and a lack of control during bowel movements. In certain cases, rectal prolapse is linked to pelvic floor issues stemming from urinary incontinence. Patients might also experience the sensation that a portion of the tissue is protruding from the anal canal.

References

1. Shearer, J.; Gurland B.; Bungo, C. (2025.): „Operations for Rectal Prolapse“ in Hoffman, M.; Hull, T. L.; Bochner, B. H. (eds): „Major Complications of Female Pelvic Surgery - A Multidisciplinary Approach“, Springer Nature Switzerland AG, Cham, Switzerland, pp. 231. – 233.
2. Sciuto, A.; Montesarchio, L.; Pede, A.; Pirozzi, F. (2024.): „Robotic Ventral Rectopexy for Rectal Prolapse“ in Ceccarelli, G.; Coratti, A. (eds): „Robotic Surgery of Colon and Rectum“, Springer Nature Switzerland AG, Cham, Switzerland, pp. 141.
3. Arthur, R.; Glass, C. A. (2024.): „Rectal Prolapse Reduction“ in Cash, J. C. (ed): „Family Practice Guidelines, Sixth Edition“, Springer Publishing Company, LLC, New York, USA, pp. 949.
4. Aarons, C. B.; Sentovich, S. M. (2015.): „Anorectum“ in Doherty, G. M. (ed): „Current Diagnosis and Treatment - Surgery, 14th Edition“, McGraw-Hill Education, New York, USA, pp. 744. – 766.
5. Vogler, S. A.; Ban, K. A. (2023.): „Rectal Prolapse: Rectopexy vs Perineal Proctosigmoidectomy“ in Umanskiy, K.; Hyman, N. (eds): „Difficult Decisions in Colorectal Surgery, Second Edition“, Springer Nature Switzerland AG, Cham, Switzerland, pp. 433. – 434.
6. Browse, N. L.; Black, J.; Burnand, K. G.; Thomas, W. E. G. (2005.): „Browse's Introduction to the Symptoms & Signs of Surgical Disease, Fourth Edition“, CRC Press, Taylor & Francis Group, Informa Business, Boca Raton; USA, pp. 468.
7. Steele, S. R.; Goldberg, J. E. (2009.): „Rectal Prolapse: Evidence-Based Outcomes“ in Cohn, S. M. (ed): „Acute Care Surgery and Trauma - Evidence-Based Practice“, Informa UK Ltd, London, UK, pp. 357. – 358.

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