Evergen**



A patient's guide to rectal prolapse

Causes, symptoms & treatments

TABLE OF CONTENTS

Rectal prolapse		4
	Causes	6
	Signs and symptoms	7
	Diagnosing rectal prolapse	8
	Potential complications of untreated rectal prolapse	9
Surge	rγ for rectal prolapse	10
	Perineal approaches (through the anus)	10
	Abdominal approaches (through the belly)	12
After	rectal prolapse surgery	14
	Potential complications of rectal prolapse repair	14
	What to expect after rectal prolapse surgery	15

Rectal prolapse

Rectal prolapse occurs when part of the large intestine's lowest section (rectum) slips outside the muscular opening at the end of the digestive tract (anus). While rectal prolapse may cause discomfort and lead to problems with fecal incontinence or constipation, it is rarely a medical emergency.

This guide contains information about rectal prolapse.

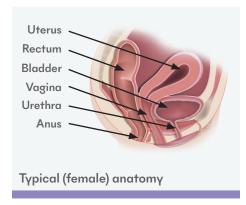
If you or someone you know is suffering from rectal prolapse, we hope this guide provides helpful information.

Rectal prolapse

Anatomy of the anorectal and pelvic area

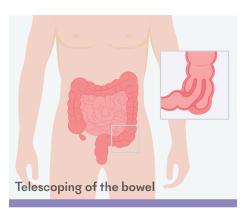
Your rectum is the last segment of your large intestine before your anus.

It is primarily a reservoir that holds stool before it exits your body. When stool arrives in your rectum, it triggers the urge to have a bowel movement, and a network of muscles pushes the stool out through your anus.



What is rectal prolapse?

Prolapse is a general term that healthcare providers use to describe any body part that has fallen from its normal position. A prolapse usually occurs because the supporting muscles have weakened or deteriorated due to age or other medical conditions.



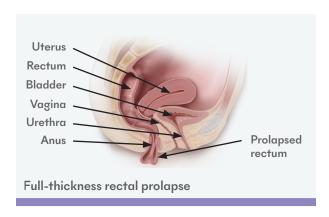
When rectal prolapse occurs, the rectum travels with the stool during a bowel movement, slipping down like a telescope into the anal canal—and sometimes out the other side.

Rectal prolapse encompasses at least three different conditions, depending on the extent of the problem and the tissue type that has fallen out of position: internal prolapse, mucosal prolapse and full-thickness rectal prolapse.

In **internal prolapse**, the prolapsed tissue does not pass beyond the anal canal and does not pass out of the anus.

Mucosal prolapse is the protrusion of only the rectal mucosa from the anus; this might be confused with a hemorrhoid.

Full-thickness rectal prolapse is the protrusion of the full thickness of the rectal wall through the anus. This is the type of rectal prolapse most likely to be associated with symptoms.



What causes rectal prolapse?

Rectal prolapse occurs because the muscles holding the rectum in place become weakened over time. As many as 50% of prolapse cases may be caused by persistent straining during bowel movements due to chronic constipation. Other conditions that predispose someone to rectal prolapse include:

- Advanced age
- Chronic constipation or diarrhea
- Chronic coughing or sneezing
- Chronic obstructive pulmonary disease (COPD)
- Cystic fibrosis
- Intestinal parasite infections
- Pregnancy and childbirth
- Previous pelvic injury
- Previous pelvic floor surgery
- Spinal cord or nerve damage (e.g., spinal tumors, multiple sclerosis)

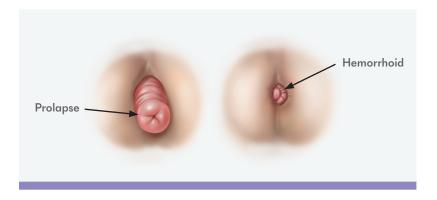
Who is affected by rectal prolapse?

Rectal prolapse is uncommon. It most often affects women over the age of 50. It is often found with prolapse of other pelvic floor organs, such as the uterus or bladder. Less commonly, rectal prolapse may occur in young children because of chronic diarrhea or cystic fibrosis. It is estimated to occur in about 2.5 of every 100,000 people.¹

What are the signs and symptoms of rectal prolapse?

Rectal prolapse tends to get worse over time. At first, the prolapse occurs only with a bowel movement and then returns to its normal position. At this stage, you might not have any signs or symptoms of rectal prolapse.

As the prolapse worsens, you might feel your rectum falling out during a bowel movement or when you cough or sneeze. If the prolapsed rectum remains out, you might get the sensation of sitting on a ball, your anus might be sore to the touch and you might confuse the prolapse with a bad hemorrhoid.



Once the prolapse is apparent, you might not be able to push it back in after a bowel movement. If this happens, you might need emergency surgery. You might also notice these symptoms:

- A constant feeling of pressure or a bulge in your anus
- Uncontrolled leakage of mucus or stool from your anus
- Constipation, or the inability to evacuate stool completely
- A red, fleshγ mass hanging out of your anus
- Anal pain, itching or bleeding

How is rectal prolapse diagnosed?

Your doctor will review your medical history and then examine your rectum. You will be asked to sit on the toilet and strain so your doctor can see the degree of the prolapse. This might feel embarrassing, but it is essential for an accurate diagnosis. To rule out other possible problems, your doctor might use one or more of the following tests:

- Colonoscopy: This test examines the inside of your large intestine using a long, flexible proctoscope. It is used to look for polyps or cancer in your rectum.
- Lower GI series (barium enema): This test is a series of video X-rays of your lower gastrointestinal tract to examine the extent of internal prolapse that might not be noticed externally.
- **Defecography:** This is an imaging study of your sphincter muscles using X-ray or magnetic resonance imaging (MRI). It can be used to examine the extent of internal prolapse and to detect prolapse of other pelvic floor organs, such as the uterus or bladder.
- **Digital rectal exam:** This is an exam using lubricated, gloved fingers that can give γour doctor a better understanding of the extent of internal prolapse.

Patients with rectal prolapse often have several other conditions. Your doctor can use the tests above to make sure all these problems are addressed at the same time. The most common problems seen along with rectal prolapse include rectal ulcers and bleeding, urinary incontinence and prolapse of other pelvic floor organs, such as the uterus, rectum or bladder.

What happens if rectal prolapse is left untreated?

If rectal prolapse is not causing you bothersome symptoms, you may choose to do nothing about it right away. You might be able to live with it by pushing your rectum back inside manually. However, it is important to realize that the prolapse will worsen and will not heal on its own. Untreated rectal prolapse will not turn into cancer.

Your risk of the following complications increases the longer you go without treatment:

- Fecal incontinence: As your anal muscles continue to stretch, you may have increased difficulty holding in gas and stool. Of all people with rectal prolapse, 50 to 75% report this complication.
- Constipation: Bunching of the rectum and other problems with muscle control may make it difficult to have a bowel movement.
 Some people have alternating constipation and incontinence.
- Rectal ulcers: Friction and external exposure of the mucous lining
 of your rectum may cause rectal ulcers, which are painful sores
 that can bleed.
- Incarceration: An incarcerated rectum gets stuck hanging out of your anus and can't be pushed back in. This is dangerous because the rectum's blood supply could be cut off (strangulation). This can lead to tissue death and decay of the rectum (gangrene) and require emergency surgery.

Surgery for rectal prolapse

Surgical procedures for rectal prolapse can be done either perineally (through the bottom) or abdominally (through the belly). Options include removing part of the rectum, pulling the rectum back up and anchoring it, or a combination of these. All these approaches aim to stop the prolapse from coming back and usually result in a significant improvement in quality of life.

Your doctor's choice of procedure depends on your age and physical condition, the extent of your prolapse and whether or not you have other conditions that need to be treated at the same time. You can discuss any of these procedures with your doctor to decide which option is best for you.

Perineal approaches (through the bottom)

Surgery using a perineal approach is done through the anus without an abdominal incision. This type of surgery is thought to result in fewer complications and less pain than abdominal procedures but may increase the risk of a prolapse coming back. The most common operations using a perineal approach include stapled transanal rectal resection (STARR), Altemeier's procedure and Delorme's procedure.

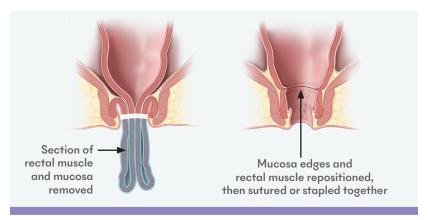
STARR

STARR is a recently developed operation that involves removing, through the anus, the section of the rectum that contains the prolapse. The two remaining ends of the rectum are then reconnected using special permanent surgical staples made of titanium.

Not all treatment options are available in all countries. Discuss your options with your physician.

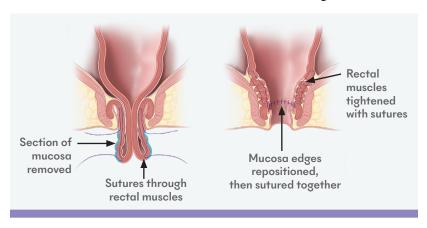
Altemeier's procedure

This operation is used to correct full-thickness rectal prolapse. During this procedure, the surgeon pulls the rectum through the anus, removes a portion of the rectum and sigmoid colon and attaches the remaining rectum to the large intestine.



Delorme's procedure

This operation involves the surgeon removing some of the prolapsed lining of the rectum (mucosa) and then reinforcing the muscle of the rectum using stitches. Unlike Altemeier's procedure, it does not involve a full-thickness removal of the rectum and sigmoid colon.



Not all treatment options are available in all countries. Discuss your options with your physician.

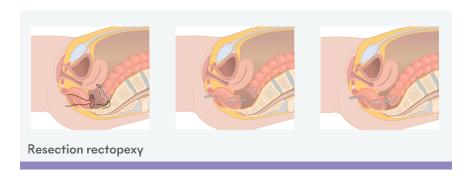
Abdominal approaches (through the belly)

Surgery using an abdominal approach involves making an incision in the belly, dissecting the rectal attachments from their adjacent tissues and then pulling the rectum upwards toward the sacrum (back wall of the pelvis) to restore its normal anatomy. The repositioned rectum is then affixed into place with either stitches or mesh. If the patient suffers from chronic constipation, extra rectal tissue may also be removed.

These days, abdominal approaches are usually done either laparoscopically or robotically, leaving smaller scars than traditional operations. These approaches often have the benefits of less pain, a shorter hospital stay and shorter recovery time. The most common operations using the abdominal approach include resection rectopexy, ventral rectopexy and suture rectopexy.

Resection rectopexy

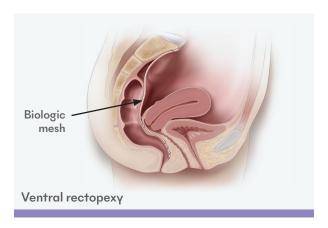
Resection rectopexy is often performed on patients with significant constipation. After dissecting the rectum from the surrounding tissues, extra sigmoid colon is removed and the remaining colon is attached to the top of the rectum with stitches. Additional stitches are used to keep the rectum in place and prevent further rectal prolapse.



Not all treatment options are available in all countries. Discuss your options with your physician.

Ventral rectopexy

Ventral rectopexy is a relatively recent surgical technique that restores the rectum to its normal position in the pelvis so that it no longer protrudes through the anus. After dissecting the rectum from the surrounding tissues, either a synthetic (plastic) or a biologic mesh material is used to elevate the rectal wall and restore the normal rectal anatomy. In some studies, biologic mesh has been shown to restore normal function with fewer of the risks associated with a permanent plastic mesh.²



Suture rectopexy

This operation involves dissecting the rectum from the surrounding tissues and then stretching the rectum upward to get rid of the extra prolapsed tissue. The repositioned rectum is then held in place with stitches to the adjacent fascia.

After rectal prolapse surgery

What are the potential complications of rectal prolapse repair?

All surgeries come with a low risk of certain general complications that your doctor will review with you. These complications include problems such as bleeding, infection, blood clots, injury to nearby organs and complications associated with anesthesia.

Additional serious risks associated with rectal prolapse surgery include the following:

- Anastomotic leak: If the two ends of your bowel that were cut and then reconnected during surgery fail to heal, you might have internal stool leakage that requires another surgery to repair.
- Alterations in bladder or sexual function: Nerve damage that leads to bladder dysfunction, impotence or retrograde ejaculation can occur following rectal prolapse repair.
- Bleeding: Significant blood loss can occur when the surgeon frees
 your rectum from the adjacent tissues. Bleeding is often controlled
 during the operation but may result in hematoma formation and pain
 that you notice only after you go home from the hospital.
- Constipation: For some people, constipation gets worse after surgery, and sometimes occurs even if you didn't have it before.
- Intestinal injury: Bowel injury can occur when the surgeon frees your rectum from the adjacent tissues. If bowel injury is not discovered during the operation, severe infection and pelvic sepsis can occur.

What should I expect after surgery for rectal prolapse?

For many patients, surgery relieves or greatly improves symptoms. Factors that influence the outcome of rectal prolapse repair include your general health, the overall health of your pelvic floor muscles before surgery and the severity of your prolapse. Your doctor will provide you with a list of post-operative recommendations tailored to minimize your recovery time, which may include using a stool softener and avoiding strenuous activity.

REFERENCES

- 1. Kairaluoma MV, Kellokumpu IH. Epidemiologic aspects of complete rectal prolapse. Scand J Surg. 2005;94(3):207-210.
- 2. van der Schans EM, Boom MA, El Moumni M, Verheijen PM, Broeders IAMJ, Consten ECJ. Mesh-related complications and recurrence after ventral mesh rectopexy with synthetic versus biologic mesh: a systematic review and meta-analysis. Tech Coloproctol. 2022;26(2):85-98.

Evergen 1425 Innovation Place West Lafayette, IN 47906 USA T 855.201.6914 evergenbio.com

Approved for global use.

© 2025 Evergen. All rights reserved.

13676 ROO 07/29/2025







