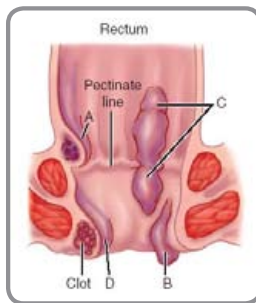


## Hemorrhoids

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**Hemorrhoids** are enlarged or swollen veins in the lower rectum. The most common symptoms of hemorrhoids is bleeding, itching, and pain. Hemorrhoids may be internal (located inside the lower rectum) or external (under the skin around the anus). Both types of hemorrhoids can be present at the same time.



*In this figure A represents an internal hemorrhoid, B represents an external prolapsed hemorrhoid, C is a mixed hemorrhoid (both internal and external), D is a thrombosed hemorrhoid and E is an external hemorrhoid.*

### Hemorrhoid Symptoms

Symptoms of hemorrhoids can include the following:

- Painless rectal bleeding
- Itching or pain in the anal region
- Protrusion of tissue (a hemorrhoid) through the anus
- Leakage of feces

**Rectal bleeding** — Painless rectal bleeding with a bowel movement is a common symptom of hemorrhoids. At the end of the bowel movement, you may see bright red blood on the stool, in the toilet, or on the toilet tissue after wiping.

Without an examination, it is not possible to know the cause of rectal bleeding. Thus, EVERYONE with rectal bleeding should be examined by a healthcare provider.

**Itching** — Hemorrhoids commonly cause itching and irritation of skin around the anus. Itching may be caused by a combination of factors, including the following:

- Internal hemorrhoids may allow leakage of feces, which can be irritating to the skin around the anus.
- Overzealous cleansing may irritate the region around the anus
- People with external hemorrhoids may develop small growths of skin, known as skin tags. These can be difficult to keep clean, causing irritation.
- Swelling of hemorrhoids may cause itching and irritation.

**Pain** — Pain may develop in patients who have of blood clots (thrombosis) within the hemorrhoid. This can occur within both external and internal hemorrhoids. Thrombosed external hemorrhoids are bluish-purple lumps. As the skin around the anus becomes inflamed and swollen, extreme pain can develop.

### Hemorrhoid Causes

Hemorrhoids are more likely to develop in people who also:

- Strain to pass stools
- Have chronic constipation or diarrhea
- Sit for long periods
- Are older
- Are pregnant
- Have a pelvic tumor

### Hemorrhoid Diagnosis

To diagnose hemorrhoids, your clinician will examine your rectum and anus, and may insert a gloved finger into the rectum or perform a sigmoidoscopy or colonoscopy.

### Initial Hemorrhoid Treatment

Several options are available for the treatment of hemorrhoids. For most patients, conservative or minimally invasive measures are effective in relieving symptoms.

**Fiber supplements** — Increasing fiber in the diet is one of the best ways to soften and bulk the stools, which can help to reduce bleeding from hemorrhoids. Fiber is found in fruits and vegetables. The recommended amount of dietary fiber is 20 to 35 g/day.

Several fiber supplements are commercially available, including psyllium seed (Metamucil®), methylcellulose (Citrucel®), and calcium polycarbophil (Fibercon®). Fiber supplements may be used alone or in combination with dietary changes, and are safe to use every day. These are not habit forming, and can be used lifelong.

### Provisional dietary fiber table

Food	Fiber, g/serving
<b>Fruits</b>	
Apple (with skin)	3.5/1 medium-sized apple
Apricot (fresh)	1.8/3 apricots
Banana	2.5/1 banana
Cantaloupe	2.7/half edible portion
Dates	13.5/1 cup (chopped)
Grapefruit	1.6/half edible portion
Grapes	2.6/10 grapes
Oranges	2.6/1 orange
Peach (with skin)	2.1/1 peach
Pear (with skin)	4.6/1 pear
Pineapple	2.2/1 cup (diced)
Prunes	11.9/11 dried prunes
Raisins	2.2/packet
Strawberries	3.0/1 cup
<b>Juices</b>	
Apple	0.74/1 cup
Grapefruit	1.0/1 cup
Grape	1.3/1 cup
Orange	1.0/1 cup
<b>Vegetables, Cooked</b>	
Asparagus	1.5/7 spears
Beans, string, green	3.4/1 cup
Broccoli	5.0/1 stalk
Brussels sprouts	4.6/7-8 sprouts
Cabbage	2.9/1 cup (cooked)
Carrots	4.6/1 cup
Cauliflower	2.1/1 cup
Peas	7.2/1 cup (cooked)
Potato (with skin)	2.3/1 boiled
Spinach	4.1/1 cup (raw)
Squash, summer	3.4/1 cup (cooked, diced)
Sweet potatoes	2.7/1 baked
Zucchini	4.2/1 cup (cooked, diced)

Food	Fiber, g/serving
<b>Vegetables, Raw</b>	
Cucumber	0.2/6-8 slices with skin
Lettuce	2.0/1 wedge iceberg
Mushrooms	0.8/half cup (sliced)
Onions	1.3/1 cup
Peppers, green	1.0/1 pod
Tomato	1.8/1 tomato
Spinach	8.0/1 cup (chopped)
<b>Legumes</b>	
Baked beans	18.6/1 cup
Dried peas	4.7/half cup (cooked)
Kidney beans	7.4/half cup (cooked)
Lima beans	2.6/half cup (cooked)
Lentils	1.9/half cup (cooked)
<b>Breads, pastas, and flours</b>	
Bagels	1.1/half bagel
Bran muffins	6.3/muffin
Cracked wheat	4.1/slice
Oatmeal	5.3/1 cup
Pumpernickel bread	1.0/slice
White bread	0.55/slice
Whole-wheat bread	1.66/slice
<b>Pasta and rice cooked</b>	
Macaroni	1.0/1 cup (cooked)
Rice, brown	2.4/1 cup (cooked)
Rice, polished	0.6/1 cup (cooked)
Spaghetti (regular)	1.0/1 cup (cooked)
<b>Flours and grains</b>	
Bran, oat	8.3/oz
Bran, wheat	12.4/oz
Rolled oats	13.7/1 cup (cooked)
<b>Nuts</b>	
Almonds	3.6/half cup (slivered)
Peanuts	11.7/1 cup

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**Laxatives** — If increasing fiber does not relieve constipation, or if side effects of fiber are intolerable, a laxative may be recommended.

People are often concerned about the regular use of laxatives, fearing that they will not be able to have a bowel movement when the laxative is stopped. However, there is little to no evidence that laxatives are “addictive” or that using laxatives increases the risk of constipation in the future. Instead, use of laxatives may actually prevent long-term problems with constipation.

**Warm sitz baths** — During a sitz bath, you soak the rectal area in warm water for 10 to 15 minutes two to three times daily. Sitz baths work by improving blood flow and relaxing the internal anal sphincter.

**Topical treatments** — Various creams and suppositories are available to treat hemorrhoids, and many are available without a prescription. Pain-relieving creams and hydrocortisone rectal suppositories may help relieve pain, inflammation, and itching, at least temporarily.

### Minimally Invasive Hemorrhoid Procedures

If you have bothersome hemorrhoid symptoms after using conservative measures, you may want to consider a minimally invasive procedure. Most procedures are performed as a day surgery. The following procedures are intended for treatment of internal hemorrhoids.



**Rubber band ligation** — Rubber band ligation is the most widely used procedure.

It is successful in approximately 70 to 80 percent of patients.

Rubber bands or rings are placed around the base of an internal hemorrhoid. As the blood supply is restricted, the hemorrhoid shrinks and degenerates over several days. Many patients report a sense of “tightness” after the procedure, which may improve with warm sitz baths. Patients are encouraged to use fiber supplements to avoid constipation.

Delayed bleeding may occur when the rubber band falls off, usually two to four days after the procedure. In some cases, a raw and sore area develops five to seven days following the procedure. Other less common complications of rubber band

ligation include severe pain, thrombosis of other hemorrhoids, and localized infection or pus formation (abscess). Rubber band ligation rarely causes serious complications.

**Laser, infrared, or bipolar coagulation** — These methods involve the use of laser or infrared light or heat to destroy internal hemorrhoids. Coagulation may have fewer complications than rubber band ligation. However, recurrence rates may be higher than with rubber band ligation.

**Sclerotherapy** — During sclerotherapy, a chemical solution is injected into hemorrhoidal tissue, causing the tissue to break down and form a scar. Sclerotherapy may be less effective than rubber band ligation.

### Hemorrhoid Surgery

If you continue to have symptoms despite conservative or minimally invasive therapies, you may require surgical removal of hemorrhoids (hemorrhoidectomy). Surgery is the treatment of choice for patients with large internal hemorrhoids.

Hemorrhoidectomy involves surgically removing excess hemorrhoidal tissue and the anal canal lining. There are various techniques for this surgery. It is successful in 95 percent of patients. In most cases, general or spinal anesthesia is used.

Most patients experience some pain following hemorrhoidectomy. A medication may be recommended to relax the sphincter muscle during the recovery period.

**Surgery complications** — Complications following standard surgical removal of hemorrhoids (called closed hemorrhoidectomy) can include difficulty emptying the bladder or bowels, a bladder infection, or rectal bleeding.