

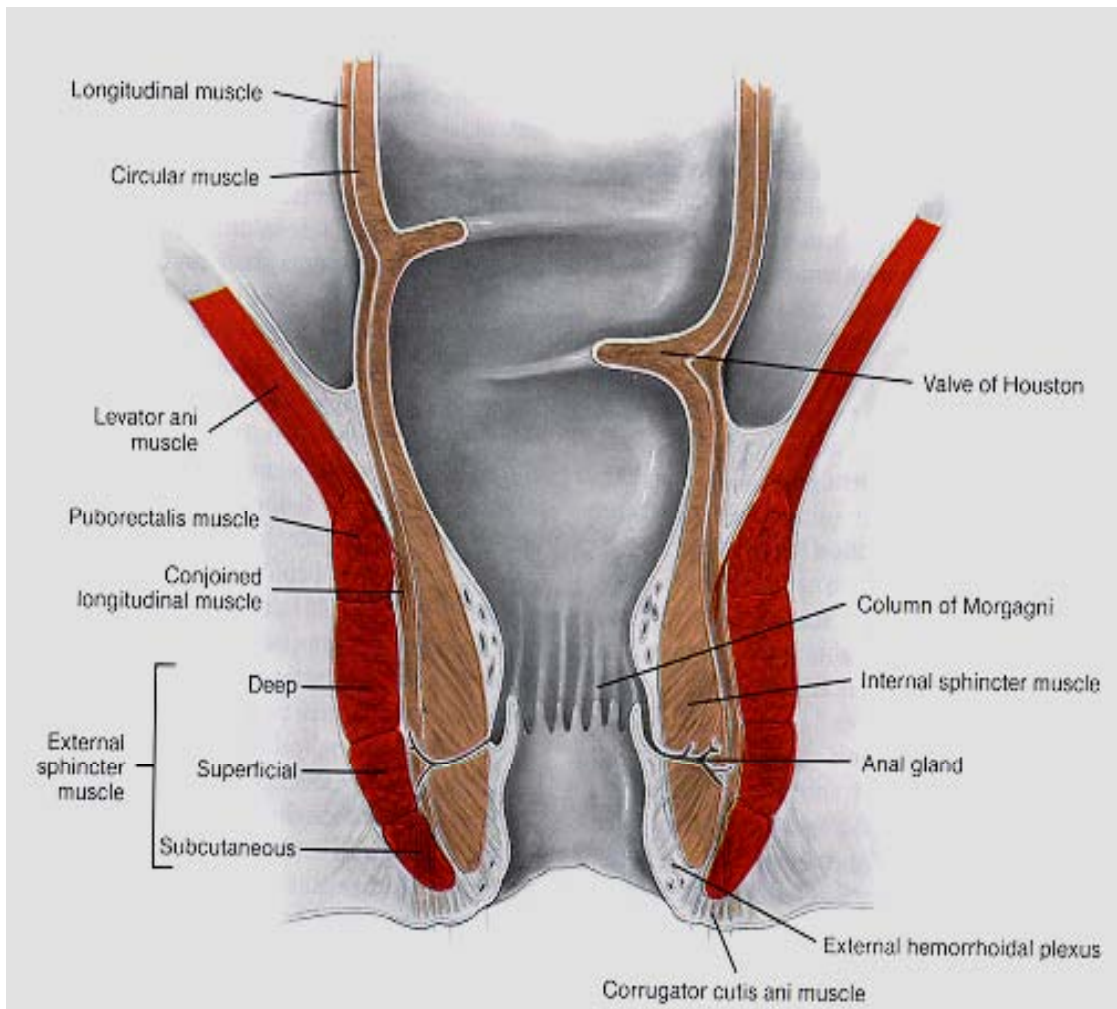
Anorectal Abscess/Fistula

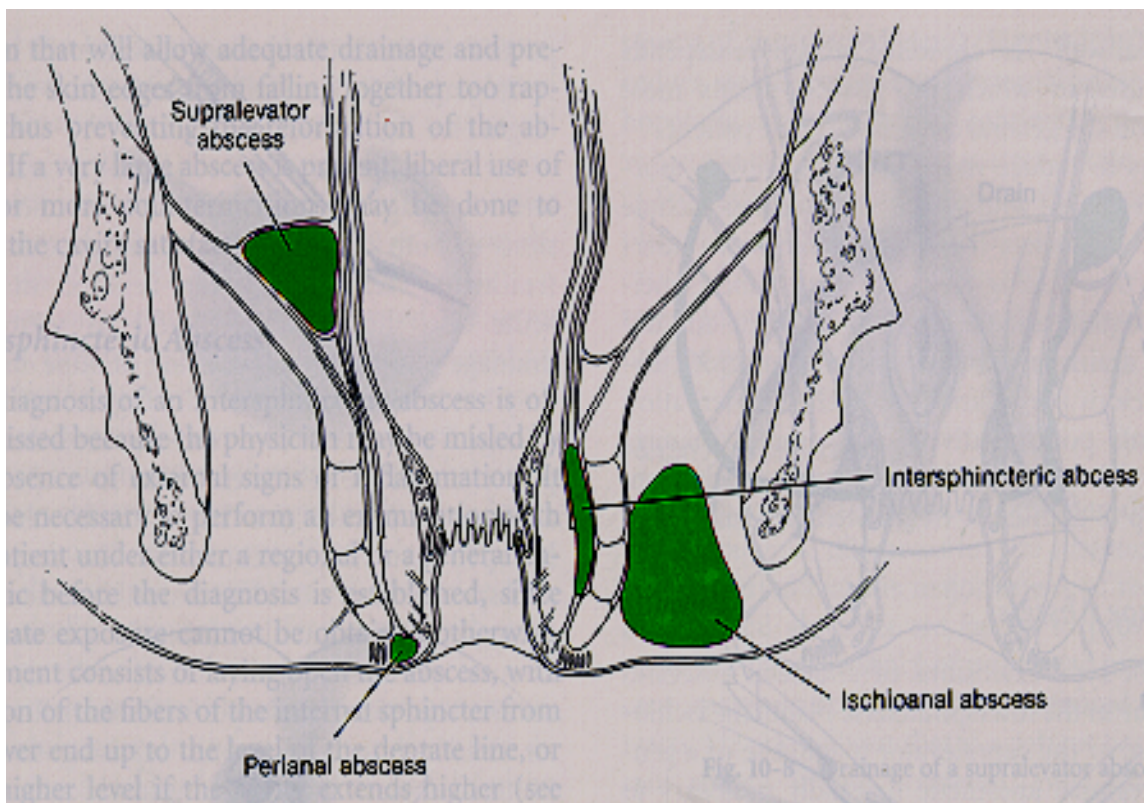
by: Robert K Cleary MD

location: Michigan Heart & Vascular Institute, 5325 Elliott Dr, Suite 104

mailing address: PO Box 974, Ann Arbor, MI 48106

Anorectal Abscess and Fistula





WHAT IS AN ANORECTAL ABSCESS/FISTULA ?

An anorectal abscess and fistula are the result of an anal gland infection. Anal glands are located where the anus becomes the rectum. When an infection occurs, it can spread to the buttocks where it presents as a tender, warm, red swelling called an abscess. If the abscess spontaneously drains, the path between the anal gland infection on the inside to where the abscess comes to a head on the outside may persist. This may result in a chronic, intermittent draining opening called a fistula. Symptoms of anorectal abscesses and fistulas include pain, swelling, drainage, bleeding, constipation, general feeling of being ill, and rarely urinary difficulties.

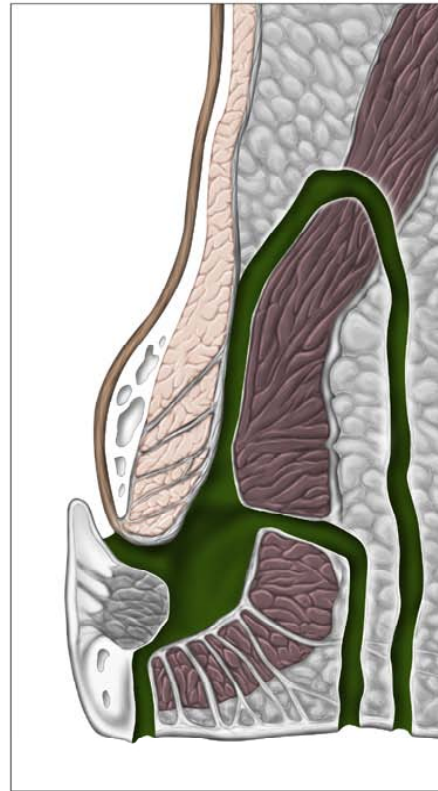
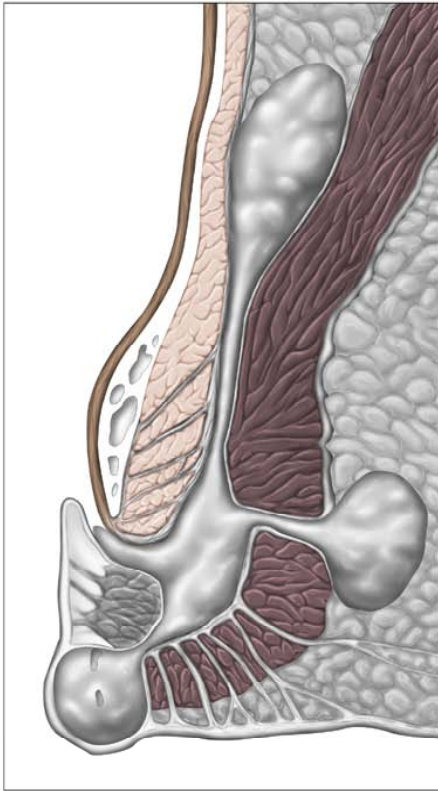
An abscess may drain by itself or require drainage by a doctor in the office or emergency room. After an abscess is drained, it will become a chronically draining fistula about 50% of the time.

Abscess and fistulas are classified based on the relationship to the anal sphincter muscles.

ABSCESS

FISTULA

Perianal	20%	Intersphincteric	70%
Intersphincteric	18%	Transsphincteric	23%
Ischiorectal	60%	Suprasphincteric	5%
Supralevator	2%	Extrasphincteric	2%



AT THE TIME OF YOUR VISIT

When you are seen by the colorectal specialist, you will be asked several questions with regard to your history. An examination of the anal canal and rectum may be performed. This may include inspection of the skin around the anus and a digital rectal exam performed with a well-lubricated gloved finger. This may be followed by the insertion of a small anoscope which is a small tube placed into the anal canal to better visualize the anal canal and lower rectum. Rarely, a proctosigmoidoscopy is performed which involves placing a lighted scope into the rectum and lowermost colon. These examinations usually

cause little or no discomfort. If you present with a tender abscess, inspection of the skin around the anus may be all the exam that is needed.

TREATMENT OPTIONS

What makes treatment of abscesses and fistulas of the anus and rectum complex and unique is the relationship to the anal sphincter muscles. These muscles control the passage of gas and stool. The goal of treatment is to eradicate the abscess and fistula and, at the same time, preserve anal sphincter muscle function

1) EXPECTANT MANAGEMENT

Some patients with fistulas (not abscesses) that cause minimal or no symptoms may elect not to have surgery and be treated expectantly. There is a small chance that the fistula tract could become cancer in the future (<1%).

2) SURGICAL OPTIONS

Surgical options are many and depend on the anatomy and complexity of the abscess and fistula and its relationship to the anal sphincter muscles.

A) Incision and Drainage of Abscess

In the case of an abscess, it may be drained under local anesthetic in the office, or under general or spinal anesthesia in the operating room, depending on complexity. If the procedure is performed in the operating room, an attempt may be made to find the offending anal gland infection. If found, a definitive procedure may be performed to prevent recurrence. However, this is usually possible only for small abscesses. For most patients, draining the abscess to address the immediate problem and resolve the infection is the first priority. After drainage, there is about a 50% chance that the abscess will recur or persist as a fistula. A more definitive procedure under more elective circumstances may be required to resolve a fistula.

B) Anal Fistulotomy With or Without Seton

Treatment of an anal fistula (as opposed to some abscesses) is a less urgent problem. The treatment options are many and varied because fistulas can be simple or complex. Complex fistulas may have circuitous tracts or involve a significant part of the anal sphincter muscle. The goal of fistula surgery is to cure the fistula while preserving the ability to control gas and stool.

At the time of surgery, a probe will be placed in the outside opening near the anus in an attempt to pass the probe to the inside opening located near the junction between the anus and rectum. If the fistula involves only a small amount of sphincter muscle, then the tract

between the inside and outside will be laid open over the probe, thereby resolving the fistula. This leaves an open wound that eventually heals in from the bottom up over the course of 2-4 weeks. If the fistula involves a large amount of sphincter muscle, then only part of it will be divided. The remaining portion of the muscle will be surrounded by a silk thread or rubber band called a seton. This seton will eventually erode its way through the muscle over the course of several weeks or months. The concept is that the seton, by eroding through the remaining muscle over time, completes the operation in a fashion that allows the fistula to be ultimately eradicated with the muscle healing behind it. This potentially preserves the sphincter muscle function and thereby preserves the ability to control gas and stool. That is, as the seton makes its way through the remaining muscle, the muscle behind it heals and remains intact. If the seton does not make its way through the muscle in a defined period of time (up to 16 weeks) then a second trip to the operating room may be necessary to divide the remaining fistula tract. This second operation is often less risky than the first with regard to gas and stool control, because the seton will cause an inflammatory reaction which allows the muscle to remain and place and not gape when divided. Rarely, some patients prefer to leave the seton for an indefinite period of time because for most, it is not an uncomfortable problem to have.

C) ADVANCEMENT FLAP

Another option for the complex anal fistula is the advancement flap. This procedure involves the development of a flap composed of the inner lining of the rectum. This flap is drawn over the internal opening where the anal gland infection is located and sutured beyond it thereby covering the internal opening with the flap. This operation is done through the anal opening in the operating room under a general or spinal anesthetic. The advantage of this operation is that no sphincter muscle is divided and the risk for leaking gas and stool is potentially small. But not every patient's anatomy is amenable to this procedure. And while the early results were enthusiastic with success rates close to 80%, more recent literature suggests that this procedure works only about 50% of the time and the risk for gas and stool leakage is not 0%. In selected patients, it is a viable option.

Instead of developing a flap made of rectal lining, another option is to construct a flap outside the anus composed of skin and fat which is then moved up into to rectum to cover the internal opening from the opposite direction. This procedure has success rates similar to the rectal advancement flap. One would expect more discomfort after surgery than with the rectal flap because the flap outside the anus involves cutting and sewing skin (which has abundant pain fibers) while the cutting and sewing for the rectal flap is all on the inside where pain fibers are less abundant.

D) FIBRIN SEALANT

This option has been studied at several centers with mixed results. It involves injecting a substance into the fistula tract, which may seal it. It is done under anesthesia in the outpatient surgery department. The advantage of this procedure is that there is little risk to the ability to control gas and stool. The failure to resolve the fistula and higher

recurrence rates may be disadvantages. Success rates for simple fistulas have been reported to be 60-70% and for complex fistulas 14-60%.

WHAT TO EXPECT WITH SURGERY

You may be asked to drink a mechanical bowel prep to clean out the colon the day prior to surgery if a flap procedure is anticipated. Other patients may be asked to take enemas the day prior to or the morning of surgery. Many patients with abscesses will not need a bowel prep.

Upon arrival, you will be greeted by a receptionist and other surgery staff, including nurses and anesthesiologists. The anesthesiologist will discuss anesthetic options, which may include a general or spinal anesthetic. Prior to being taken to the operating suite, you will be greeted by your colorectal surgeon who will answer any remaining questions. You will then be taken to the operating suite where an anesthetic will be administered. The operation will likely last 20-60 minutes. You will then be taken to the recovery room where you will likely stay for about 2 hours. You will then be discharged home with written instructions. If you do not receive instructions, be sure to ask the recovery room nurse to ensure that you receive instructions prior to discharge.

DISCHARGE INSTRUCTIONS AFTER SURGERY

1) Diet

There is no special diet required. You will be encouraged to eat a well balanced diet. Since constipation can be a problem after any operation, your diet should include adequate water intake. Proper diet combined with moderate activity, such as light walking, should help restore normal bowel function. Avoid constipation. It is unlikely that the wounds will become infected or disrupted as a result of having a bowel movement. Though some pain may be experienced initially after bowel movements, you will be given a prescription for pain medicine.

2) Pain Medicine

You will be given a prescription for pain medicine to be taken by mouth. One of these prescriptions may be a narcotic. **You should not drive, drink alcohol, perform strenuous exercises, or make important decisions while taking this medication.** Some of the side effects include itching, shortness of breath, and constipation. Constipation may be avoided by following the measures related to diet above. A stool softener like Colace may be helpful as well (use as directed). Pain medications should not be taken on an empty stomach since they can cause nausea.

3) Warm Tub or Sitz Baths (Not Advancement Flaps)

We will ask you to sit in a warm tub or sitz bath several times a day. Most people prefer to do this 4 or 5 times a day. The frequency is more important than the duration. For example, it is better to sit in a warm tub for 15-20 minutes 4 times a day, than to sit for 1 hour twice a day. This will keep your wounds clean and provide you with comfort. The exception may be patients who have rectal or cutaneous advancement flaps. These patients may be asked to shower rather than bathe.

4) Fluids

You should drink plenty of water, up to 6-8 glasses of water per day unless instructed otherwise by your primary physician for those with heart disorders. This is an important step in preventing constipation, especially for those taking narcotic pain medication.

5) Constipation

If you have not had a bowel movement within 48 hours after surgery, you should call our office. We may recommend medications to assist you (stool softeners like Colace, Milk of Magnesia, etc.). It is important not to go 4, 5, or 6 days after surgery without a bowel movement if this is not your routine. This can lead to fecal impaction in the rectum, which under worst circumstances may require a trip to the operating room to remove.

6) Activity

You may return to your usual physical activity. This would include walking and climbing stairs. Jogging, running, bicycle riding and other exertional activities should be avoided until your first postop visit, at which time you will be given further instructions. You should not drive a car if you are taking narcotic pain medications.

RISKS AND COMPLICATIONS OF SURGERY

1) Recurrence

The chance for recurrence is increased if the internal opening associated with the offending anal gland infection is unable to be found. If the internal opening is able to be identified and a definitive operation is able to be performed, recurrence rates should be < 10%. In the case of an acute abscess, the goal is to first drain the abscess, often without a more definitive operation. In these cases, the abscess may recur or become a fistula about 50% of the time. Recurrence after fistula surgery may be related to branch extensions that are unable to be seen at the original operation. The incidence of recurrence likely increases with more complex fistulas involving much of the sphincter muscles or with branch extensions.

2) Incontinence

Studies show that the rates of incontinence vary in the literature from <5% to 50%. The incidence of loss of fine control of gas and liquid stool is probably higher than the incidence of leaking solid stool. Complex fistulas that involve greater portions of anal sphincter muscle are greater risks for this complication. Should this complication occur, treatment options would include specialized muscle training (biofeedback pelvic floor retraining) or sphincter muscle repair. In a small percentage of patients, the problem may be permanent.

3) Bleeding

4) Infection

5) Deep Venous Thrombosis

These are blood clots in the legs that can go to the lungs and can occur after any surgery. It can cause death and is distinctly rare after this surgery.

6) Heart Attack (rare)

7) Pneumonia (rare)

8) Seton Placement and Staged Procedures

This is not really a complication, but something you should be aware of and is describe in a previous section under the treatment of fistulas. If the fistula involves a large amount of anal sphincter muscle (complex), it may be necessary to place a silk thread or rubber band (seton) around the involved muscle. This may require a 2nd operation weeks to months later to complete the operation. This 2nd operation has attendant risks, most of which are the same as the original operation.

9) Death (rare)

10) Other

We should be notified of any problems seemingly related to your operation. Some specific ones are:

a) Pain not controlled by pain medication

b) Excessive bleeding

You will have some bleeding which should not alarm you.

If you soak pads every few hours, please call the office.

c) Unable to urinate or feeling of inability to empty bladder completely

d) Failure to resolve pain

If any additional problems arise or you need reassurance, please call our office and ask to speak with one of the nurses. Our office number is 734-712-8150. For more information, try the American Society of Colon and Rectal Surgeons website at www.fascrs.org