

HOW IS A FISTULA TREATED?, *continued*

chosen. In the first stage of a staged fistulotomy, the tract is probed, the skin and fat are divided but the muscles are left intact. A circular drain called a **seton** is placed from the external opening, through the tract and internal opening and brought out of the anal canal. It is then tied to itself as a loop. A seton is usually made from a soft, flexible, Silastic strand similar to a floppy rubberband and is tied with with a black silk suture. The seton allows the fistula and any associated cavity to drain and to contract down. It also keeps the tract and external site open so that a new abscess is much less likely to develop. Over time, the tissue within the seton scars down and thins, and the seton becomes looser. The tissues outside of the seton also contract and fill in up to the seton. When this process is well along, it is time for the **second stage fistulotomy**. During this procedure the remaining tissue within the seton is divided and the wound is cleaned. Just as in the primary fistulotomy, the wound is then left open to heal secondarily. The second stage may often be performed in the office with local anesthetic. It usually takes about 5-10 minutes. It is very important to keep the wound clean and pack it with gauze so that the skin does not heal over and create another cavity. Healing generally takes from 3 to 12 weeks.

High fistulas

High fistulas are the most difficult to treat since much or all of the sphincter mechanism may be below the fistula tract. This group also includes complex fistulas with multiple tracts or recurrences. Fortunately, these are the least common fistulas. A first stage procedure is often performed for further abscess drainage and delineation of the anatomy. One or more setons may be placed and cavities and tracts are cleaned out (curetted).

A second stage procedure may include

- ▶ second stage fistulotomy
- ▶ advancement flap repair
- ▶ fibrin glue placement
- ▶ fistula plug procedure, or
- ▶ other approaches

continued

To make an appointment or ask a question, call the Division of Colon and Rectal Surgery at **617-636-6190**.

For urgent problems, call the Tufts Medical Center operator at **617-636-5000** and ask for the on-call physician for Colon and Rectal Surgery.

Some patients may keep their setons for prolonged periods as a method for controlling the situation without causing further damage.

WHAT ARE THE RISKS OF FISTULA TREATMENT?

The main risks associated with the treatment of fistulas are incontinence, recurrence of the abscess or fistula, and bleeding. Not treating an abscess or fistula may lead to more extensive destruction of the surrounding tissues including the anal sphincter muscles and eventual incontinence in addition to chronic pain and discharge.

Patients with certain risk factors may be treated somewhat differently. These include individuals with diabetes, inflammatory bowel disease, AIDS and other reasons for immunosuppression such as medications used after transplantation. It may not be possible to know which of these procedures is most appropriate prior to surgery and examination under anesthesia. At that time the actual course of the fistula may be determined along with the amount of sphincter beneath the tract. The exact procedure to be performed is then chosen based on the more accurate information obtained.

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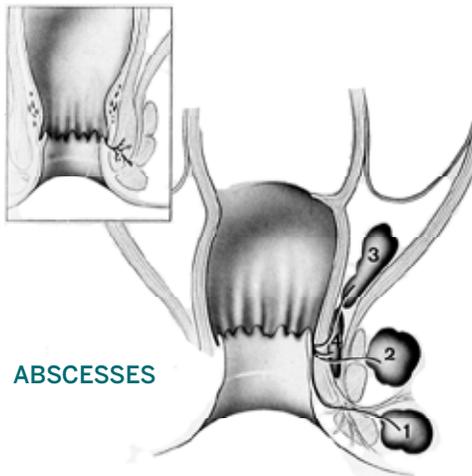
Abscess and Fistula

Symptoms and Treatment

Tufts Medical
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WHAT IS AN ABSCESS?

The anal canal is lined with glands that secrete mucous and other fluids to lubricate the canal and the stool as it passes. Bacteria normally live in these glands. As they multiply, they leave the glands, mix with the stool and are passed. Sometimes the duct that leads to a gland becomes clogged. Then the multiplying bacteria cannot escape which leads to an infection. As the bacteria build up, the body tries to contain the infection by walling it off. This creates a pus-filled cavity — the abscess. Pain, swelling, and a soft or firm lump may be felt. Patients may also have a fever or chills. The abscess may spontaneously drain pus or a bloody discharge which may be seen on the underwear or on the toilet paper.



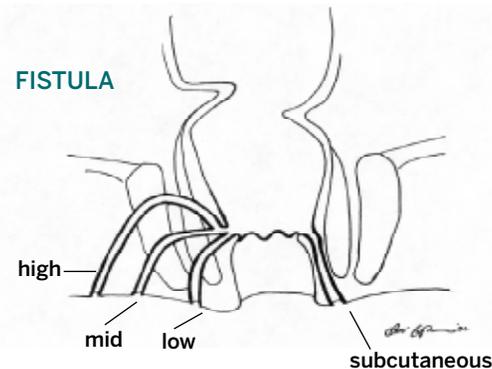
HOW IS AN ABSCESS TREATED?

The primary treatment of an abscess is adequate drainage. If an abscess does not drain on its own, it should be drained either in the office with local anesthetic or in the operating room using a regional or general anesthetic. As soon as an abscess is recognized, it should be drained. After the procedure, patients should follow the After Anal and Rectal Surgery Instructions carefully for best healing. Antibiotics are generally not necessary in treating an

abscess because the body has already walled off the infection. Antibiotics rarely result in improvement without drainage. One half of abscesses will resolve after drainage and one half will recur, either as an abscess or as a fistula.

WHAT IS A FISTULA?

A fistula starts with an abscess. Over time the process burrows a tunnel from the abscess to the skin outside the anus. At this point patients may notice some drainage of pus or blood but there is often little pain. A fistula may also develop after surgical drainage. A fistula persists if there is an opening inside the anus (where the original duct was located). This internal opening is often closed or scarred over at the onset of the abscess but may re-open as the pressure builds up. A fistula, therefore, is a connection or tunnel between an internal opening in the anal canal and an external opening on the skin. Occasionally, the fistula may run up along the rectum rather than down to the skin.



Fistulas usually do not heal on their own. Patients with fistulas may have continuous or intermittent drainage, or may suffer cycles of skin healing, buildup of the abscess and subsequent drainage. The fistula tract may run very superficially just beneath the skin, or through or over the anal sphincter muscles. The path of the fistula in relation to the anal sphincter muscles determines the treatment approach.

HOW IS A FISTULA TREATED?

Fistulas may be divided into low, mid and high tracts depending on how much of the anal sphincter muscles lie between the tract and the skin. The anal sphincters surround the anal canal like 2 cylinders or donuts. When they contract they close the anal canal and provide control (continence). The internal anal sphincter is smooth or involuntary muscle and it keeps the anal canal closed at rest. The external sphincter is striated or voluntary; it allows you to close the canal by squeezing. Together, they guard against leakage or incontinence.

Low fistulas

A low fistula crosses from the anal canal to the skin below the muscles or through the lower one third of the sphincter muscles. If the fistula does not involve much sphincter muscle, a simple procedure called a **primary fistulotomy** is done either in the office with local anesthesia or in the operating room. A primary fistulotomy is performed by placing a thin metal probe in the tract and dividing the tissue from the skin to the tract. This includes skin, fat and, possibly, some anal sphincter muscle. The edges may be trimmed, and the wound is left open to heal from the bottom up. It is very important to keep the wound clean and pack it with gauze so that the skin does not heal over and create another cavity. Healing generally takes from 3 to 12 weeks.

Mid level fistulas

A mid level fistula tract runs through the middle one third of the sphincter muscles. Performing a primary fistulotomy for these fistulas carries a higher risk of incontinence because of the greater amount of sphincter muscle that must be cut. Therefore, a **staged fistulotomy** is usually performed. In the first stage, the area is examined in the operating room while you are anesthetized. The exact course of the fistula is determined and then the procedure to be performed is

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