



By: IFFGD; Edited by Satish S.C. Rao, M.D., PhD., FRCP (LON), AGAF, J. Harold Harrison, MD, Distinguished University Chair in Gastroenterology, Department of Gastroenterology/Hepatology, Augusta University, Augusta, Georgia



International Foundation for Gastrointestinal Disorders (www.iffgd.org)

Reading time: 6 minutes

© Copyright 2024 by the International Foundation for Gastrointestinal Disorders (Original

What is an anal fistula?

A fistula is an abnormal connection or tunnel between two organs or two tissue surfaces. An anal fistula is known medically as “fistula-in-ano” and is sometimes also referred to as perianal fistula. Perianal refers to the area of the body surrounding the anus, and particularly the skin in that area. Perianal fistulas are when these abnormal connections or tunnels occur between the anal canal (or rectum) and an external opening in the skin near the anus (the lower opening of the GI track).

Anatomy

In order to understand the cause, treatment, and complications of therapy for anal fistulas, an understanding of the anatomy of the anal canal (or rectum) is necessary. The anal canal is the terminal (end) portion of the gastrointestinal tract. Two rings of muscle, the internal anal sphincter and external anal

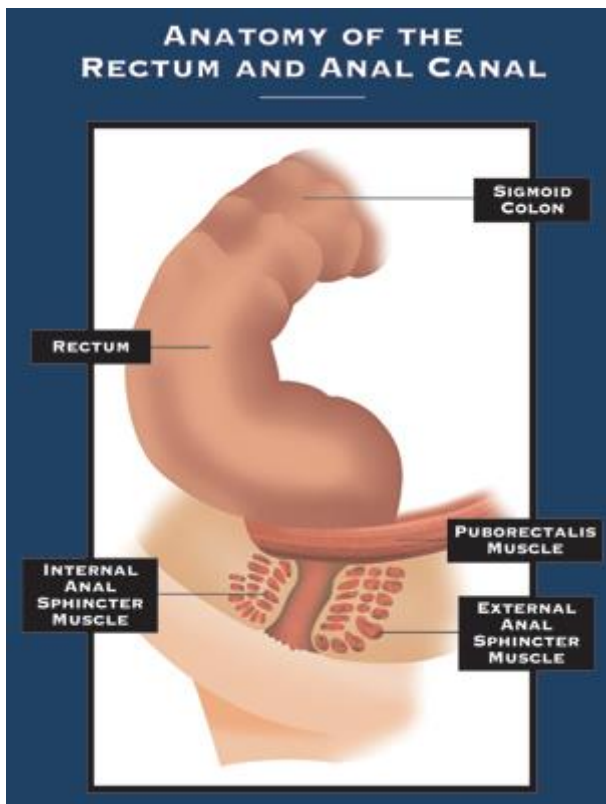
sphincter, surround the anal canal. The internal anal sphincter is composed of smooth muscle and is not under voluntary control. The external anal sphincter is composed of skeletal muscle and is under voluntary control. Together these two muscles are very important in the maintenance of the ability to control bowel movements. Approximately one to two centimeters inside the anal canal, the lining changes. There is a line that marks this change called the dentate line. There are also anal glands located between the layers of the internal and external anal sphincters. These glands contain fluid that will empty into the anal canal at the level of the dentate line. It is when these anal glands get infected that abscesses and anal fistulas can occur. An abscess is a pocket of pus from an infection.

Anal fistulas and abscesses

Anal fistulas and abscesses of the perianal region are different signs of the same clinical disease. They usually develop in the upper part of the anus, where the anal glands are located. When these glands become infected, they can cause a perianal abscess. The abscesses may break through the skin and drain, causing a fistula. As many as 50% of people with an abscess get a fistula. However, a fistula can also occur without an abscess if there is an injury to the anal canal. This sometimes can happen during surgery to the rectum or anus.

What does an anal fistula look like?

An anal fistula looks like a hole in the skin near your anus. This hole is the portion of the tunnel on the skin which drains the abscess and connects to it inside the body. It might have drainage coming from it, especially when you touch around it. The drainage can be pus, blood and/or bowel movement. Some older fistulas may close at the opening, while the rest of the tunnel remains. This can cause pain and swelling in the area until the fistula reopens to let out the drainage. You



may or may not be able to see the fistula with a mirror.

Causes of Perianal Fistulas

Perianal fistulas can occur in anyone; however, it is twice as common in men and people assigned male at birth (AMAB). Perianal fistulas are often a result of a specific cause or disease. These can include:

- Colitis
- Crohn's disease
- Chronic diarrhea
- Diverticulitis
- Chronic sexually transmitted infection (STI)
- Infection with tuberculosis or HIV
- Radiation treatment in the perianal region (such as for rectal cancer)
- Complications of surgery near the anus
- Being immunocompromised (having a weakened immune system) or prone to more frequent infections

Symptoms

Symptoms of an anal fistula include:

- skin irritation around the anus
- a throbbing pain that may worsen with movement, a bowel movement, or coughing
- smelly discharge near the anus
- passing pus or blood with a bowel movement
- swelling and redness around the anus
- difficulty controlling bowel movements
- fever

Diagnosis

Diagnosis of a perianal fistula rests on identifying

- the external opening on the skin
- the internal opening to the abscess in the anal canal
- the path or tunnel of the fistula from one opening to another

Perianal fistulas often present as small holes or red bumps on the skin, and healthcare providers can find most external openings during a physical exam. During the exam, they will press on the skin where they suspect a fistula to determine if there is a drainage. Often the area is extremely painful to the touch the examination must be performed in the operating room under sedation. This is called examination under anesthesia (EUA). Finding the internal opening of the fistula can be more difficult. They may use a lighted

scope, like an anoscope or proctoscope (a longer scope that can visualize your rectum) to view inside the rectal canal. Knowing the complete path of an anal fistula is important for effective treatment. To determine the path (or tunnel), healthcare providers may use a probe inserted at one opening, travelling through the path and coming out at the other opening. This allows them to see where the fistula travels and if it goes through sphincter muscles. There are also several imaging tests that can be done.

Learn more about The Diagnosis of Anal Fistulas with IFFGD Fact Sheet No. 145 *Anal Fistulas: Symptoms and Diagnosis*

Treatment

The goals of treatment for a perianal fistula are the complete closure of the fistula, the elimination of sepsis (if present), the prevention of recurrence, and continence (continued ability to control bowel movements). Sepsis is when the body responds improperly to an infection. It can be very serious and must be treated promptly. Combined medical and surgical treatments are used to treat perianal fistulas. Having a multidisciplinary team which includes a gastroenterologist, radiologist, and colorectal surgeon is important. Colorectal surgeons are experts in the surgical and non-surgical treatment of diseases of the colon, rectum, and anus. The treatment and management of perianal fistulas requires precise diagnostics to understand the disease, the correct choice of treatment option, either pharmacological or surgical, or both, as well as a monitoring plan to ensure they do not recur. There are many options and open and honest discussions between the healthcare team and the patient are extremely important.

Procedures for Anal fistulas are generally outpatient procedures and patients go home the same day without need for an overnight stay in the hospital. Pain medication is often prescribed following the procedure as the affected area will be sore and painful. Alongside the pain medications, some find taking a sitz bath (sitting in a warm bath) several times a day to be helpful. It will also aid in healing the area faster. The perianal area will likely have a wound dressing which will need to be changed often and kept clean.

What are the complications of an anal fistula?

A fistula that goes untreated generally will not heal on its own. Even with treatment they may return. This can lead to long-term complications, such as:

- Persistent infection. A fistula that has a symptomatic response, but is not healed completely may return, forming a new abscess. Sometimes, the fistula may seem to be healing and may close at the opening, but the abscess is still present and the fistula may reopen or a new fistula appear.
- Fistula extension. Sometimes a chronic fistula can extend in new directions, creating new dividing paths and openings in the skin. These complex fistulas are very difficult to repair.
- Cancer. Anal cancer has been found in untreated anal fistulas that have been present for years. Chronic inflammation and erosion are known risk factors for cancer.
- Fecal incontinence. Some people experience fecal continence after anal fistula surgery due to damage to the anal sphincter.

About IFFGD

The International Foundation for Gastrointestinal Disorders (IFFGD) is a 501(c)(3) nonprofit education and research organization. We work to promote awareness, scientific advancement, and improved care for people affected by chronic digestive conditions. Our mission is to inform, assist, and support people affected by gastrointestinal disorders. Founded in 1991, we rely on donors to carry out our mission. Visit our website at: www.iffgd.org.

IFFGD

537 Long Point Road, Unit 101
Mt Pleasant, SC 29464

About the Publication

Opinions expressed are an author's own and not necessarily those of the International Foundation for Gastrointestinal Disorders (IFFGD). IFFGD does not guarantee or endorse any product in this publication or any claim made by an author and disclaims all liability relating thereto. This article is in no way intended to replace the knowledge or diagnosis of your doctor. We advise seeing a physician whenever a health problem arises requiring an expert's care.

For more information, or permission to reprint this article, contact IFFGD by phone at 414-964-1799 or by email at iffgd@iffgd.org

This Fact Sheet is provided in part by Takeda Pharmaceuticals and donors of IFFGD.