



Anal Fissure

Introduction

An anal fissure is a condition in which there is a longitudinal tear in the skin of the anal canal. A fissure is completely different from a hemorrhoid. Patients with fissures complain of severe pain with defecation, likening passage of a bowel movement through the anus to passing “shards of glass” or passing a “knife”. The pain may be present just during the act of defecation or may continue for several hours afterwards. Because there is a tear in the skin, bleeding may occur with the bowel movement and when wiping.

Fissures almost always occur in the skin of the anus at the center back or center front. Small injuries occur to the skin of the anus every time we have a bowel movement – resulting in mild itching after the bowel movement – and the body heals these before the next bowel movement. Tears in the center front or back do not heal very well. If you injure the center front or back repeatedly, you may develop a wound there that cannot heal without help.

Fissures can tear through the skin and into the anal sphincter muscle, at which point the anal sphincter muscle goes into spasm to protect the area. Spasm of the anal sphincter makes it hard and painful to relax the anus for bowel movements and doctor exams. When the anal sphincter goes into spasm, it further cuts off blood flow to the area of the fissure, and this makes it even more unlikely the fissure will heal on its own.

Fissures occur after hard bowel movements, wiping too roughly, using the anus repetitively as occurs in diarrhea, and when inserting objects in the anus. Many patients who develop fissures say they have regular, soft, daily stools – we do not know why they develop their fissure.

Medical Therapy

- Medical therapy is the first step in treating a fissure. Medical therapy involves avoiding further injury and enhancing your healing ability.
- Patients who follow all steps of medical therapy have a 50% to 90% likelihood of healing their fissure without surgery.

Avoid further injury:

- Prevent constipation when in pain by taking Colace 100 mg twice a day or MiraLAX 17 g daily.
- When the pain is gone, switch to a high fiber diet.
- Avoid diarrhea
- Drink plenty of fluids

Enhance healing ability:

- Apply heat to the anal crease for 10 minutes 2-3 times per day.
 - Heat dilates the area blood vessels and brings more healing blood flow to the area.
 - The heat must be next to the anal opening, so sitting on a heating pad will not work.
 - Consider:
 - Take a hot bath, called a sitz bath
 - Apply a hand-warmer packet to anal opening (can purchase at ACE hardware or hardware stores)
 - Microwave a wet washcloth, roll into a cigar shape, and place in cleft
 - USB rechargeable hand-warmer placed into a sock and placed in the cleft



- Apply a medicated salve, if prescribed
 - Your doctor may prescribe a medicated salve designed to help improve blood flow to the area of the fissure.
 - The medicated salves used most commonly are nitroglycerin salve, nifedipine salve, and diltiazem salve.
 - Apply a pea-sized amount of the salve to the pucker of the anus, not inside the anus.
 - Salves work best when applied after heat treatment.
 - Medicated salves only help if used in conjunction with stool softeners and heat; they have no function if used alone.

Surgical Therapy

- Surgical therapy is used to treat fissures only if medical therapy is unsuccessful.
- Surgery carries risks including bleeding, infection, and damage to fecal control.
- Surgery does not prevent getting fissures again in the future.

Surgical Options

Lateral Internal Sphincterotomy (LIS)

- LIS is considered the “gold standard” for surgical therapy of anal fissures
- Will force healing of 99% of fissures within 1-2 weeks of surgery
- The surgery is done as an outpatient and takes about 10 minutes to complete.
- Commonly recovery time after LIS is completed over a long weekend.
- Risks are bleeding, infection, bruising, and fecal incontinence.
- Mild leakage and difficulty with controlling flatulence is common in the first week or two after the surgery.
- Less than 3% of patients experience long term fecal incontinence.

Botox Injection

- Botox is injected into the internal aspect of the anal sphincter muscle.
- Will force healing in between 50% to 80% of fissures within 1-2 weeks of surgery.
- The surgery is done as an outpatient and takes about 10 minutes to complete.
- Your insurance company must preauthorize the Botox prior to scheduling this surgery.
- Risks are bleeding, infection, bruising, and fecal incontinence.
- Mild leakage and difficulty controlling flatulence is common in the first week or two after surgery.
- Rarely, Botox can paralyze the anal sphincter muscle completely and can take up to three months to disappear.

Summary of Medical Therapy Instructions:

- Avoid becoming constipated by taking either Colace 100mg twice a day, or MiraLAX 17g per day.
- Heat for 10-15 minutes to the anus three times per day. Dry well if moist heat used.
- Apply medicated salve pea-sized amount two to three times per day following heat therapy.