CONDITION

Anal fissure

Learn about anal fissure symptoms, causes, diagnosis, treatment options, complications, and when rectal pain or bleeding needs urgent care.

WHAT IT IS
Small tear in the anal lining

BODY SYSTEM
Digestive

MAIN SYMPTOMS
Sharp pain during bowel movements, burning pain afterward, bright red bleeding, itching

WHAT CAUSES IT
Hard or large stool

HOW IT IS DIAGNOSED
Symptoms and gentle visual examination

MAIN TREATMENT
Conservative bowel care

CAN IT BE CURED?
Yes, many heal with conservative care

IS IT AN EMERGENCY?
Sometimes, with heavy or ongoing bleeding

LONG-TERM OUTLOOK
Usually heals but may recur or become chronic

Overview

An anal fissure is a small tear in the moist tissue lining the anus, the opening through which stool leaves the body. It often forms when hard or large stool stretches and injures this lining.

Fissures commonly cause sharp pain during a bowel movement, burning pain afterward, and a small amount of bright red bleeding. Most are not dangerous and many heal when stool is kept soft and further injury is avoided.

A recent fissure is considered acute . A chronic anal fissure has lasted longer and may have thickened edges, exposed muscle fibers, or a small nearby skin tag. Definitions vary, but symptoms lasting more than several weeks may be treated as chronic.

Pain can make the internal anal sphincter, a muscle that helps control bowel movements,

tighten or spasm. This reduces blood flow and delays healing, creating a pain-spasm cycle.

Most fissures occur along the front or back midline of the anus. Multiple tears, an unusual location, or failure to heal may indicate another condition and require further evaluation.

Symptoms

The typical symptom is sharp, cutting, or tearing pain during a bowel movement. Burning or throbbing may continue for minutes to several hours. Avoiding bowel movements because of pain can worsen constipation and make the next bowel movement more difficult.

Bleeding is usually light and bright red, appearing on toilet paper, on the outside of stool, or as a small amount in the toilet. Blood mixed through the stool, dark maroon blood, or black, tar-like stool is not typical and needs medical assessment.

Other features may include:

In infants, caregivers may notice crying during bowel movements or bright red streaks on stool or a diaper. Discuss rectal bleeding in a child with a healthcare professional rather than assuming it is a fissure.

Fever, pus, increasing swelling, or severe constant pain may indicate an infection or abscess. Contact a healthcare professional promptly.

Seek emergency care for heavy or ongoing bleeding, black or tar-like stool, fainting, confusion, marked weakness, or shortness of breath.

- A visible tear near the anal opening
- Itching or irritation
- Muscle spasm or tightness
- A small skin tag beside a chronic fissure

Causes and risk factors

Passing hard, dry, or unusually large stool is the most common cause. Constipation, straining, and avoiding bowel movements can increase the risk. Repeated diarrhea may also irritate and injure the anal lining.

Fissures can develop during childbirth because of stretching and pressure. Anal penetration or insertion of an object may also cause a tear. Infants commonly develop fissures, often with hard stool, while older adults may be more vulnerable because blood flow to the area can

decrease with age.

Risk factors include:

Less commonly, fissures are associated with Crohn's disease, infections affecting the anal area, or, rarely, anal cancer. Another cause is more likely to be investigated when there are several tears, a fissure away from the front or back midline, or symptoms that repeatedly return or do not heal.

- Ongoing constipation or frequent diarrhea
- Repeated straining
- Low dietary fiber intake
- Recent childbirth
- Anal trauma
- A previous fissure

Diagnosis

A healthcare professional can often diagnose a fissure from the symptoms and a gentle visual examination. They may ask about pain, bleeding, bowel habits, constipation, diarrhea, childbirth, medicines, and digestive diseases.

The clinician may gently separate the buttocks to look for a tear. A digital rectal examination or anoscopy, which uses a short instrument to inspect the anal canal, may be too painful during an active fissure. It may be postponed or performed only when necessary.

Further evaluation may be needed if the diagnosis is uncertain, the symptoms or fissure location are unusual, treatment does not help, or bleeding may have another source. Testing can include examination of the rectum or colon, infection testing, or assessment for inflammatory bowel disease.

Rectal bleeding can also come from hemorrhoids, inflammation, polyps, or cancer. Do not assume bleeding is caused by a fissure, especially when it is new, recurrent, mixed into stool, or accompanied by unexplained weight loss or changed bowel habits.

Treatment and management

Treatment aims to keep stool soft, reduce pain and repeated injury, and relax the internal anal sphincter. The approach depends on the fissure's cause, duration, and response to initial care.

Many acute fissures heal with conservative measures:

Topical anesthetics may provide short-term pain relief but do not treat the underlying spasm, and prolonged use may irritate the skin. Opioid pain medicines are generally avoided because they can worsen constipation.

If a fissure becomes chronic or does not improve, prescription treatment may be offered. Topical nitroglycerin relaxes the sphincter and improves blood flow. Headache is common, and it may cause dizziness or low blood pressure. It can interact dangerously with certain medicines, including some drugs for erectile dysfunction, so disclose all medicines and use it only as directed.

Topical calcium channel blockers, such as diltiazem or nifedipine, also relax the sphincter and may cause fewer headaches. In some countries they are compounded and prescribed off-label, meaning the approved labeling does not specifically include this use. Ask about side effects, availability, and correct application.

Botulinum toxin injection temporarily weakens part of the sphincter so the tear can heal. Temporary difficulty controlling gas or stool can occur.

For a chronic fissure that has not healed, surgery may be considered. During lateral internal sphincterotomy , a surgeon divides a small part of the internal sphincter to reduce spasm. It is highly effective in appropriately selected patients but can impair control of gas or stool. Risk may be higher with an existing continence problem, prior anal surgery, childbirth-related sphincter injury, or certain bowel diseases.

An advancement flap or another sphincter-preserving procedure may be considered when cutting the muscle poses greater risk. A colorectal surgeon should explain expected benefits, alternatives, recovery, and continence risks.

- Gradually increase fiber from vegetables, fruit, beans, whole grains, or a recommended supplement. Increasing it too quickly may cause gas or bloating.
- Drink enough fluid to support soft stool. People with heart or kidney conditions should follow their clinician's fluid limits.
- Use a stool softener or osmotic laxative if recommended. The choice should account for age, pregnancy, other conditions, and current medicines; ask a clinician or pharmacist.
- Avoid delaying bowel movements and prolonged straining.
- Soak the anal area in comfortably warm water using a sitz bath to ease pain and relax the muscles.
- Clean gently and avoid harsh soaps, fragranced products, and vigorous wiping.

Complications

The main complication is a chronic fissure that repeatedly reopens. Pain may lead to delayed bowel movements, worsening constipation and creating harder stool. Recurrence is more likely when constipation, diarrhea, or straining continues.

A chronic fissure may develop a skin tag or enlarged tissue nearby. These changes are usually not dangerous.

Treatment complications include headache, dizziness, low blood pressure, or skin irritation from ointments. Botulinum toxin and surgery may temporarily or, less often, persistently affect control of gas or stool.

A fissure does not turn into cancer. However, another condition can resemble one, so an unusual or nonhealing sore should be reassessed.

Follow up

An uncomplicated fissure may improve over days to weeks. Continue the recommended bowel-care plan after pain decreases because hard stool can reopen the tear.

Arrange follow-up if pain or bleeding continues, symptoms repeatedly return, treatment causes side effects, or you cannot keep stool soft. Persistent symptoms may require confirmation of the diagnosis or treatment to relax the sphincter.

Contact a healthcare professional promptly for increasing pain, fever, swelling, pus, abdominal pain, persistent diarrhea, unexplained weight loss, a major change in bowel habits, or new difficulty controlling gas or stool.

Seek emergency care for:

These signs are not typical of a straightforward fissure and may require urgent testing or treatment.

- Heavy bleeding or bleeding that will not stop
- Fainting, confusion, severe weakness, or breathing difficulty
- Black, tar-like stool
- Severe illness with rapidly worsening rectal pain or swelling

Sources

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