CONDITION

Anorectal abscess

Learn about anorectal abscess symptoms, causes, diagnosis, drainage treatment, possible fistula formation, and when to seek urgent care.

WHAT IT IS
Pocket of pus around the anus or lower rectum

BODY SYSTEM
Digestive

MAIN SYMPTOMS
Throbbing anal pain, tender swelling, redness or warmth, fever or chills

WHAT CAUSES IT
Bacterial infection in a blocked anal gland

HOW IT IS DIAGNOSED
Physical and rectal examination, CT or MRI for deep abscesses

MAIN TREATMENT
Drainage

CAN IT BE CURED?
Yes, drainage treats the abscess

IS IT AN EMERGENCY?
Sometimes, with rapidly worsening swelling or redness

LONG-TERM OUTLOOK
Recurrence or anal fistula may develop

Overview

An anorectal abscess is a pocket of pus that forms in or around the anus or lower rectum. "Anorectal" refers to the anus and rectum, the final parts of the digestive tract.

Most anorectal abscesses begin when a small gland inside the anus becomes blocked and infected. The infection can remain close to the skin or spread into deeper spaces around the rectum. A deeper abscess may cause severe pain or general illness without an obvious lump.

An anorectal abscess usually needs prompt medical treatment. The main treatment is drainage, which creates an opening so the pus can leave the body. Antibiotics like amoxicillin or doxycycline alone usually cannot clear an established abscess because they may not reach the center of the pus-filled cavity well enough.

Some abscesses later lead to an anal fistula. A fistula is an abnormal tunnel between the anal canal and nearby skin. It may cause repeated swelling, pain, or drainage after the original abscess has been treated. This does not happen to everyone, but it is an important reason to attend follow-up appointments.

Anorectal abscesses are different from hemorrhoids. Hemorrhoids are swollen blood vessels, while an abscess is an infection. Because several conditions can cause anal pain or swelling, an examination is often needed to identify the cause.

Symptoms

Pain is the most common symptom. A superficial abscess may cause constant, throbbing pain near the anus. Sitting, walking, coughing, or having a bowel movement may make it worse.

Other possible symptoms include:

Symptoms from a deeper abscess can be less obvious. There may be pain in the rectum, pelvis, buttock, or lower abdomen rather than a visible skin change. Fever may be absent, particularly in older adults or people whose immune systems are weakened.

Contact a healthcare professional promptly for new, persistent anal pain, a painful lump, pus-like drainage, or a suspected abscess. Same-day assessment is especially important when pain is increasing, fever is present, or the person has diabetes, inflammatory bowel disease, or a weakened immune system.

Seek emergency care for rapidly worsening swelling or redness, severe weakness, confusion, fainting, trouble breathing, skin that becomes dark or blistered, or other signs of serious illness. These symptoms may indicate that an infection is spreading and needs immediate treatment.

- A tender lump or area of swelling near the anus
- Redness or warmth of the nearby skin
- Pus or blood draining from an opening
- Fever, chills, tiredness, or feeling generally unwell
- Rectal pressure or pain without a visible lump
- Pain during bowel movements
- Difficulty passing urine, especially with a deeper or larger abscess

Causes and risk factors

Most anorectal abscesses develop from an infection in one of the tiny glands that empty into the anal canal. If a gland becomes blocked, bacteria can multiply inside it. Pus then collects in the surrounding tissue.

An abscess can also be related to Crohn's disease, a long-term inflammatory condition that can affect any part of the digestive tract. Crohn's disease may cause deep inflammation, abscesses, and fistulas around the anus.

Other possible causes include injury to the anal area, infection after anorectal surgery, or infection involving a fissure or another opening in the skin. Less commonly, an abscess may be associated with cancer, radiation treatment, tuberculosis, or certain sexually transmitted infections. A clinician may consider these possibilities when an abscess is unusual, complex, or keeps returning.

Factors that can increase the chance of severe infection or complicate healing include:

An abscess is not usually caused by poor hygiene. It is also not considered contagious in the way that a cold or stomach virus is.

- Diabetes, particularly when blood glucose is not well controlled
- Medicines or illnesses that weaken the immune system
- Crohn's disease or another form of inflammatory bowel disease
- A previous anorectal abscess or anal fistula
- Recent surgery or injury in the area

Diagnosis

A clinician usually begins by asking where the pain is located, when it started, and whether there has been swelling, drainage, fever, bowel changes, or a previous abscess. It is important to mention Crohn's disease, diabetes, pregnancy, recent procedures, and medicines that affect the immune system or blood clotting.

The examination may include looking at and gently feeling the skin around the anus. A digital rectal examination, in which a gloved finger is placed in the rectum, may help detect tenderness or deeper swelling. This examination may be limited if the area is very painful.

A superficial abscess can often be diagnosed without a scan. Imaging may be considered when the abscess is not visible, symptoms suggest a deep infection, or the condition is recurrent or complex. It may also be useful for someone with Crohn's disease or a weakened immune system.

Computed tomography, or CT, can show infection and swelling in the pelvis. Magnetic resonance imaging, or MRI, provides detailed images of soft tissue and may help map a deep abscess or fistula. In some cases, ultrasound performed through or near the anus is used.

Blood tests may look for signs of infection and check blood glucose, kidney function, or other factors that could affect treatment. Normal blood test results do not always exclude a localized abscess.

When pain prevents a full examination, a surgeon may recommend an examination under anesthesia. This allows the area to be assessed and treated while the patient is asleep or appropriately numbed.

Treatment and management

Drainage is the main treatment for an anorectal abscess. A clinician makes an opening in the abscess so that pus can drain and pressure can be relieved. Depending on the abscess's size and location, this may be performed in an office, emergency department, operating room, or hospital.

Local anesthetic may be enough for a small abscess near the skin. A deep, large, or difficult-to-reach abscess may require regional or general anesthesia. Some people need hospital care if they are very unwell or have medical conditions that increase the risk of complications.

The drainage opening is usually left open rather than stitched closed. This helps prevent pus from becoming trapped again. The surgeon may place a small drain or dressing in the cavity. Whether ongoing internal packing is used depends on the wound and local practice; routine packing can cause discomfort and is not necessary in every case.

Antibiotics may be added when there is spreading skin infection, fever or other systemic illness, a weakened immune system, or certain heart or medical conditions. They may also be used for specific bacteria or complicated infections. Antibiotics do not usually replace drainage when a drainable abscess is present.

A sample of pus is not required in every routine case. A culture may be useful when infection is severe, treatment has failed, resistant bacteria are a concern, or the immune system is weakened.

After drainage, discomfort and a small amount of blood or fluid from the wound can be expected. The care team may recommend warm-water soaks or gentle showering to keep the area clean. Patients should follow the specific instructions given for dressings and wound care.

Pain relief should be discussed with the treating clinician or pharmacist. The safest choice

depends on other health conditions and medicines. Some prescription pain medicines can cause constipation, which may make bowel movements more uncomfortable. Fluids, fiber, and a clinician-recommended stool-softening plan may help when constipation is a concern.

Do not squeeze, puncture, or try to drain a suspected abscess at home. This may push infection deeper, cause bleeding, or delay effective treatment.

If a fistula is found, treatment depends on its path and how much anal sphincter muscle it crosses. The sphincter muscles help control bowel movements. Some simple fistulas can be treated during abscess surgery, but many are addressed later after the acute infection settles. Treatment is planned carefully to clear the fistula while protecting bowel control.

Complications

An anal fistula is one of the main possible complications. It may appear as an opening near the anus that repeatedly drains pus or blood. The area may seem to heal and then become painful or swollen again.

An abscess can also return if infection remains, drainage closes too soon, or an underlying fistula is present. Repeated or complex abscesses may lead a clinician to investigate for Crohn's disease or another underlying condition.

Less commonly, infection can spread into nearby tissue or the bloodstream. This risk is greater when treatment is delayed or the immune system is weakened. Severe infection may require hospital care, intravenous fluids, antibiotics, and additional surgery.

Problems with bowel control are uncommon after straightforward drainage. Risk may be higher with complex fistulas, repeated operations, or disease involving the sphincter muscles. Surgical planning takes this into account.

Follow up

Follow-up plans vary according to the abscess's depth, the procedure performed, and the person's overall health. A clinician may check that the wound remains open enough to drain, that pain and swelling are improving, and that there are no signs of a fistula.

Some drainage during healing can be normal. Contact the care team if pain or swelling is getting worse, fever develops, drainage suddenly stops while pressure increases, or there is heavy bleeding, vomiting, difficulty urinating, or inability to pass stool or gas.

Ongoing or repeated drainage from the same spot should be assessed even if it is not very

painful. It may indicate a fistula. A new lump or return of the original pain also deserves medical review.

People with diabetes may need closer attention to blood glucose during infection and recovery. Those taking medicines that suppress the immune system should ask the prescribing clinician whether any temporary changes are needed. Medicines should not be stopped without medical advice.

Return to work, exercise, driving, and sexual activity depends on pain, wound location, anesthesia, and the type of work involved. The surgical team can provide guidance based on the procedure and progress.

Emergency care is appropriate if symptoms suggest a rapidly spreading infection, such as confusion, fainting, severe weakness, breathing difficulty, rapidly changing skin, or a marked decline in overall condition. Routine wound questions, mild ongoing drainage, and improving discomfort can usually be discussed during planned follow-up or by contacting the treating clinic.

Sources

- Gaertner WB, Burgess PL, Davids JS, et al. The American Society of Colon and Rectal Surgeons Clinical Practice Guidelines for the Management of Anorectal Abscess, Fistula-in-Ano, and Rectovaginal Fistula. Diseases of the Colon & Rectum . 2022;65(8):964-985.
- Tarasconi A, Perrone G, Davies J, et al. Anorectal emergencies: WSES-AAST guidelines. World Journal of Emergency Surgery . 2021;16:48.
- Sahnan K, Adegbola SO, Tozer PJ, Watfah J, Phillips RKS. Perianal abscess. BMJ . 2017;356:j475.
- American Society of Colon and Rectal Surgeons. Abscess and Fistula Expanded Information . Patient education resource. Accessed March 8, 2025.
- Newton K, Dumville J, Briggs M, et al. Postoperative Packing of Perianal Abscess Cavities (PPAC2): randomized clinical trial. British Journal of Surgery . 2022;109(10):951-957.