CONDITION

Pilonidal sinus disease

A pilonidal sinus is a small tunnel in the skin of the buttock cleft that can become painful, infected, or drain fluid.

WHAT IT IS
Inflamed skin tunnel in the buttock cleft

BODY SYSTEM
Skin and soft tissues

MAIN SYMPTOMS
Pain, swelling, redness, pus or blood drainage

WHAT CAUSES IT
Hairs driven into skin, causing inflammation

HOW IT IS DIAGNOSED
Examination of the skin and sinus openings

MAIN TREATMENT
Drainage, hair control, or surgery

CAN IT BE CURED?
Sometimes - treatment removes tracts, but recurrence remains possible

IS IT AN EMERGENCY?
Sometimes - spreading infection or severe illness

LONG-TERM OUTLOOK
Usually manageable, though repeated episodes can occur

Overview

A pilonidal sinus is a small pit or tunnel under the skin, usually at the top of the cleft between the buttocks. It may contain loose hairs and inflamed tissue. The condition is often called a pilonidal cyst, although it is usually a tunnel rather than a true cyst.

Some people have one or more small pits without symptoms. Others develop ongoing tenderness or drainage. If the opening becomes blocked and infected, a painful pocket of pus called an abscess can form.

Pilonidal sinus disease is separate from an anal fistula, which is a tunnel connected to the anus or bowel. Most pilonidal sinuses sit higher in the buttock cleft and do not involve the anus.

The condition matters because an abscess can become very painful and may need prompt

drainage. A sinus that repeatedly becomes inflamed can also interfere with sitting, exercise, work, sleep, and daily activities. Treatment is chosen according to whether there is an abscess, ongoing drainage, or repeated symptoms.

Symptoms

A pilonidal sinus may cause no symptoms. You might only notice one or more tiny dimples or openings in the buttock cleft.

When the area becomes inflamed, symptoms can include:

Symptoms may develop gradually or return from time to time. A chronically inflamed sinus may drain without causing severe pain.

An abscess usually causes faster changes. Pain and swelling may increase over hours or days, and sitting can become difficult. Some people also develop a fever or feel generally unwell, although this does not happen in every case.

Symptoms very close to the anus, several separate painful lumps, or similar areas in the armpits or groin may have another cause. These patterns should be assessed rather than assumed to be pilonidal sinus disease.

- Pain or tenderness, especially while sitting
- A lump or swelling at the top of the buttock cleft
- Red or warm skin
- Drainage of pus, blood, or cloudy fluid
- An unpleasant smell from the drainage
- Repeated staining of underwear or dressings

Causes and risk factors

The condition is usually acquired rather than something you are born with. Loose or broken hairs can collect in the buttock cleft. Friction, pressure, and movement may push the hairs into small openings in the skin. The body reacts to the embedded hair as foreign material, causing inflammation and sometimes infection.

The shape and depth of the buttock cleft can help trap hair and moisture. Risk is also associated with coarse body hair, prolonged sitting, repeated friction, and higher body weight. The condition is most often first noticed in teenagers and younger adults, but it can occur at

other ages and in people of any sex.

A family tendency has been reported, possibly because relatives may share body-hair patterns or the shape of the buttock cleft.

Having a pilonidal sinus does not mean you are unclean. Normal washing cannot always prevent loose hairs from entering the skin. It is also not contagious and cannot be passed to another person.

Diagnosis

A healthcare professional can usually diagnose a pilonidal sinus by asking about your symptoms and examining the buttock cleft. The finding of characteristic pits, drainage openings, or an abscess generally confirms the diagnosis.

The examination may include checking how many openings are present, where they lead, and whether there is redness, swelling, or drainage. It also helps establish how close the affected area is to the anus.

Blood tests and scans are not routinely needed for a straightforward sinus. Ultrasound or MRI may occasionally be used when the diagnosis is uncertain, the tracts appear complex, or another condition is possible.

Conditions that can look similar include boils, infected skin cysts, hidradenitis suppurativa, and an anal fistula. Hidradenitis suppurativa causes repeated painful lumps and tunnels, often in several skin folds. An anal fistula usually begins near the anus and may be linked to an infection inside the anal canal.

Treatment and management

Treatment depends on whether the sinus is causing symptoms and whether an abscess is present. There is no single procedure that is best for every situation.

A sinus with no pain, swelling, or drainage may not need immediate surgery. Monitoring the area, keeping the cleft clean and dry, and managing hair may be reasonable. New symptoms should still be assessed.

A painful abscess usually needs incision and drainage. A clinician makes a small opening so the pus can escape, reducing pressure and pain. Drainage treats the immediate infection but may not remove the underlying sinus, so symptoms can return.

Antibiotics like amoxicillin or doxycycline do not usually clear an abscess on their own because

medicine may not reach the trapped pus effectively. They may be used when infection is spreading into the surrounding skin, there are signs of wider illness, or other health factors increase the risk from infection.

For repeated inflammation, ongoing drainage, or a persistent sinus, planned treatment may be offered. Options include:

When a larger wound is closed, surgeons may move the scar away from the centre of the buttock cleft. These procedures flatten the cleft and are known as off-midline closure or flap procedures. They are often considered for larger, complex, or recurrent sinuses.

Procedures differ in recovery time, wound care, availability, and the chance of recurrence. Some approaches involve a smaller wound and quicker initial recovery but may not suit extensive tracts. An open wound takes longer to heal and needs regular dressings, but it avoids placing stitches in an inflamed area.

After treatment, you may need dressings, pain relief, and follow-up to check healing. Instructions about bathing, activity, sitting, work, and hair removal depend on the procedure. Persistent bleeding, increasing pain, or a wound that starts opening should be reported.

- Removing hairs and cleaning small pits
- Minimally invasive treatment of the pits and tunnels
- Endoscopic treatment using a small camera
- Removing the sinus and leaving the wound open to heal
- Removing the sinus and closing the wound with stitches

Complications

The most common complications are another abscess, continued drainage, and recurrence after treatment. A sinus may develop more openings or branching tracts if inflammation continues.

Infection can spread into nearby skin, causing cellulitis. This produces increasing redness, warmth, pain, and swelling. Wider infection is uncommon but needs prompt medical care.

Surgical wounds can bleed, become infected, separate, or take longer than expected to heal. A wound in the buttock cleft is exposed to moisture, pressure, and movement, which can make healing difficult.

Long-standing, repeatedly inflamed pilonidal sinuses have very rarely been linked to a type of skin cancer called squamous cell carcinoma. A persistent ulcer, unusual growth, or major

change in a chronic wound should be examined. Most people with pilonidal sinus disease will never develop this complication.

Prevention

Pilonidal sinus disease cannot always be prevented. Body-hair patterns and the shape of the buttock cleft are not fully under your control, and developing the condition is not a personal failure.

Keeping the cleft gently clean and dry may reduce trapped debris and irritation. Avoid harsh scrubbing, which can damage the skin. Reducing prolonged pressure or friction may help if these clearly trigger symptoms, although this does not guarantee prevention.

Hair control is sometimes included in treatment or recurrence prevention. Options can include clipping, depilatory products, or laser hair reduction. Shaving can irritate or cut the skin if done incorrectly, and hair-removal products may also cause a reaction. The most suitable approach depends on your skin, hair, and treatment plan.

If you have had surgery, following the wound-care and hair-management instructions for that procedure is more useful than applying general advice. Even with careful care, the sinus can return.

Living with it and what to expect

The course can be different from one person to another. Some people have small pits that never become inflamed. Others have one abscess and no further problems after treatment. Some experience cycles of swelling, drainage, improvement, and recurrence over months or years.

A draining sinus may be manageable for a time, but it does not always close permanently by itself. Repeated episodes are a reason to discuss planned treatment rather than waiting for another painful abscess.

Recovery after drainage is usually focused on allowing the cavity to heal from the inside. Recovery after planned surgery depends on the size and location of the wound and whether it was left open or closed. Dressings may be needed for days or weeks, and some open wounds take longer. Follow-up helps identify infection, delayed healing, or recurrence.

Sitting and activity are often possible as comfort allows, but restrictions differ between procedures. Return to work also depends on wound care and whether your work involves long periods of sitting, heavy lifting, or physical activity.

A small pit or scar may remain even when symptoms have settled. Recurrence is possible after any treatment, but further treatment can usually be considered if symptoms return. Most people can continue their usual work, exercise, and social activities once an active infection or surgical wound has healed.

When to get medical help

Arrange a routine appointment if you notice a new pit, repeated tenderness, or ongoing drainage in the buttock cleft. It is also reasonable to seek review if symptoms interfere with sitting, exercise, work, or sleep, even when the pain is not severe.

Seek prompt medical care if you develop:

People with a weakened immune system or poorly controlled diabetes may need earlier assessment because infections can become more difficult to manage.

Call emergency services if you have signs of severe illness, such as confusion, fainting, difficulty breathing, mottled skin, or extreme weakness. These symptoms are uncommon with a pilonidal sinus but can indicate a serious response to infection.

- A rapidly growing or very painful swelling
- Pus draining from a new lump
- Fever or chills
- Redness spreading away from the cleft
- Increasing pain after a procedure
- Heavy bleeding or a surgical wound that opens

Common questions

Is a pilonidal sinus the same as a pilonidal cyst?

The terms are often used for the same condition. "Sinus" is usually more accurate because the main problem is a small tunnel or pit under the skin, not a sealed cyst.

Can a pilonidal sinus heal by itself?

Inflammation may settle, and an abscess may drain on its own. However, the underlying pit or tunnel can remain and cause another episode. A symptom-free sinus may only need monitoring, while persistent drainage or repeated infection may need planned treatment.

Will antibiotics get rid of it?

Antibiotics may treat infection spreading through the skin, but they do not remove trapped pus, hair, or the sinus tract. A true abscess usually needs drainage. Persistent tracts may require another procedure.

Do I always need surgery?

No. A sinus that has never caused symptoms may not need an operation. An abscess needs drainage, which is a minor surgical procedure. More extensive surgery is generally considered for ongoing, troublesome, or recurrent symptoms.

Can pilonidal sinus disease come back after surgery?

Yes. Recurrence is possible after any procedure because new hairs can enter the skin or part of a tract may remain. The likelihood is influenced by the extent of the condition, the type of procedure, wound healing, and aftercare.

Is it caused by poor hygiene or is it contagious?

No. Hair, friction, pressure, and the shape of the buttock cleft all contribute. Normal hygiene cannot always prevent it, and it does not spread between people.

Sources

- Johnson EK, Vogel JD, Cowan ML, Feingold DL, Steele SR. The American Society of Colon and Rectal Surgeons' Clinical Practice Guidelines for the Management of Pilonidal Disease . Diseases of the Colon & Rectum . 2019;62(2):146-157.
- Iesalnieks I, Ommer A. German National Guideline on the Management of Pilonidal Disease: Update 2020 . Langenbeck's Archives of Surgery . 2021;406:2569-2580.
- Pilonidal sinus . NHS.
- Pilonidal cyst: Diagnosis and treatment . Mayo Clinic.
- Pilonidal sinus disease . MedlinePlus Medical Encyclopedia, US National Library of Medicine.