CONDITION

Bursitis of the heel

Learn how heel bursitis causes pain and swelling near the Achilles tendon, how it is diagnosed, and which treatments may reduce pressure and inflammation.

WHAT IT IS
Inflammation of a fluid-filled heel bursa

BODY SYSTEM
Muscles, bones and joints

MAIN SYMPTOMS
Back-of-heel pain, tenderness, swelling, stiffness

WHAT CAUSES IT
Repeated friction or compression

HOW IT IS DIAGNOSED
Clinical examination, ultrasound or MRI

MAIN TREATMENT
Nonsurgical pressure reduction and inflammation control

CAN IT BE CURED?
Sometimes, most improve but some persist

IS IT AN EMERGENCY?
Sometimes, fever with a red painful heel

LONG-TERM OUTLOOK
Most improve, but symptoms may persist or return

Overview

Bursitis of the heel is inflammation or irritation of a small, fluid-filled sac near the back of the heel. These sacs, called bursae, reduce friction between skin, tendons, and bone. When a bursa is repeatedly compressed or rubbed, it can become swollen and painful.

Two bursae are commonly involved:

Heel bursitis can occur by itself, but it often overlaps with Achilles tendinopathy. Achilles tendinopathy is irritation and weakening of the tendon that connects the calf muscles to the heel. A prominent area of heel bone, sometimes called a Haglund deformity, can also place extra pressure on the bursa and tendon.

The condition matters because ongoing pain may change how a person walks, limit exercise,

and make ordinary footwear uncomfortable. Most cases improve with measures that reduce pressure and allow the irritated tissue to recover. Persistent symptoms may require imaging, physical therapy, or evaluation for another cause of heel pain.

- The retrocalcaneal bursa sits between the Achilles tendon and the heel bone, also called the calcaneus. Pain from this bursa often feels deep in the back of the heel.
- The superficial calcaneal bursa lies between the skin and the Achilles tendon. It may become irritated by a stiff shoe counter, which is the firm material around the back of a shoe.

Symptoms

Symptoms usually occur at the back of the heel, near where the Achilles tendon attaches to the bone. They may begin after a change in exercise, repeated uphill activity, or use of shoes that press against the area. In other cases, discomfort develops gradually.

Common symptoms include:

Retrocalcaneal bursitis usually causes deeper pain just in front of the Achilles tendon. Superficial bursitis is more likely to produce a visible, tender bump under the skin.

These symptoms are not specific to bursitis. Similar pain may come from Achilles tendinopathy, a partial tendon tear, a stress injury of the heel bone, gout, inflammatory arthritis, or a skin and soft-tissue infection. Sudden pain with a popping sensation, weakness, or difficulty pushing off the foot may indicate an Achilles tendon injury rather than uncomplicated bursitis.

- Pain at the back of the heel, especially with walking, running, climbing stairs, or standing on the toes
- Tenderness when the sides or back of the heel are pressed
- Swelling near the Achilles tendon
- Redness or thickened skin where a shoe rubs
- Pain when wearing shoes with a firm or tight heel counter
- Stiffness after rest or when first getting up
- Discomfort when the ankle bends upward and compresses tissues behind the heel

Causes and risk factors

Heel bursitis is commonly caused by repeated friction or compression. The bursa responds to this stress by producing more fluid and becoming inflamed.

Activities that repeatedly load the Achilles tendon can contribute. Examples include running, jumping, hill training, or sports that require sudden changes of direction. A rapid increase in training intensity, distance, or frequency may not give the tissues enough time to adapt.

Footwear is another common factor. Shoes that are tight, rigid, or poorly fitted around the heel can irritate the superficial bursa. High heels may also increase pressure at the back of the heel in some people.

Other factors that may contribute include:

Less commonly, a bursa can become infected. This is called septic bursitis . Infection is more likely when bacteria can enter through a cut, blister, puncture, or other break in the skin. Increasing warmth, spreading redness, drainage, fever, or feeling generally unwell requires prompt medical assessment.

- A prominent upper part of the heel bone, sometimes called a Haglund deformity
- Tight calf muscles or limited ankle movement
- Changes in walking or foot mechanics
- Achilles tendinopathy or thickening of the tendon
- Work or activities that place repeated pressure on the heel
- Gout, which causes crystals to collect in joints and nearby tissues
- Inflammatory conditions such as rheumatoid arthritis or certain types of arthritis linked to psoriasis or bowel disease

Diagnosis

A clinician usually begins by asking where the pain is located, how it started, and which activities or shoes make it worse. It is helpful to mention recent changes in exercise, an injury, skin wounds, fever, previous gout attacks, and any inflammatory condition.

During the examination, the clinician may look for swelling, redness, a bony prominence, or skin irritation. They may press around the heel to identify the most tender area and move the ankle to see which positions reproduce the pain. The Achilles tendon is also checked for thickening, weakness, or signs of a tear.

Imaging is not always needed when the history and examination are clear. It may be considered when symptoms persist, the diagnosis is uncertain, or another condition is suspected.

An X-ray can show the shape of the heel bone, calcium deposits, arthritis, or some bone injuries. It does not show a bursa clearly. Ultrasound can identify fluid in a bursa and assess the nearby Achilles tendon while the foot moves. Magnetic resonance imaging, or MRI, provides more detailed images of the tendon, bursa, bone, and other soft tissues. It is usually reserved for unclear or complicated cases or for planning surgery.

Blood tests are not routinely required for simple overuse-related bursitis. They may be used when infection, gout, or an inflammatory disease is possible. If infection or crystal disease is suspected, a clinician may remove a small amount of bursal fluid with a needle. The fluid can be tested for bacteria, crystals, and inflammatory cells.

Treatment and management

Treatment depends on the cause, the bursa involved, the condition of the Achilles tendon, and how long symptoms have been present. Most cases are first managed without surgery.

Reducing the activity that triggers pain can give the bursa time to settle. This usually means relative rest rather than complete inactivity. Lower-impact activities may be more comfortable while symptoms improve. Returning too quickly to running, jumping, or hill work can cause pain to return.

Cold packs may help with pain and swelling. A cold pack should be wrapped to protect the skin. It should not be placed directly over skin with reduced sensation or poor circulation.

Footwear changes are often important. A softer or open-backed shoe may reduce direct pressure on a superficial bursa. Shoes should have enough room around the heel and should not rub the tender area. A clinician may suggest a temporary heel lift or another shoe insert to reduce strain and compression. Inserts need to fit correctly, and heel lifts are usually placed in both shoes to avoid creating an uneven leg position.

Physical therapy may address calf tightness, ankle movement, balance, and the gradual return of strength. Exercise plans may need to be adjusted when pain is at the Achilles insertion. For example, lowering the heel far below the level of a step can increase compression at the back of the heel and may not suit every person with insertional pain.

Nonprescription pain medicines may help some people. These include acetaminophen and nonsteroidal anti-inflammatory drugs like ibuprofen or naproxen , or NSAIDs, such as ibuprofen or naproxen. NSAIDs can cause stomach bleeding, kidney problems, and other side effects, and they are not appropriate for everyone. A pharmacist or clinician can help determine whether a medicine is safe based on other health conditions and medications. Follow the product label unless a healthcare professional gives different instructions.

A clinician may sometimes consider draining a swollen bursa or injecting medicine into the area. Corticosteroid injections near the Achilles tendon require caution because the medicine can weaken tendon tissue and may increase the risk of rupture. Medicine should not be injected into the Achilles tendon itself. When an injection is considered, imaging guidance may help place the needle accurately. Infection should be excluded before a steroid injection.

If the bursa is infected, treatment is different. It may involve antibiotics and drainage. The choice of treatment depends on the examination and laboratory findings.

Surgery is uncommon. It may be considered when substantial pain continues despite an appropriate period of nonsurgical care. Procedures may remove an inflamed bursa, reshape a prominent area of heel bone, or treat damaged Achilles tendon tissue. Recovery varies according to the procedure and whether the tendon needs repair.

Complications

Heel bursitis may become persistent or return if the source of pressure remains. Chronic swelling can make shoes difficult to wear and may lead to changes in walking that affect other parts of the foot or leg.

Bursitis and Achilles tendinopathy may occur together. Continued heavy loading through a painful or weakened tendon can prolong recovery. An Achilles tendon rupture is not a usual result of uncomplicated bursitis, but the risk may be greater when significant tendon disease is present or after an injection into or too close to the tendon.

An infected bursa can spread infection into nearby skin or deeper tissues if it is not treated. This complication is uncommon, but it requires prompt medical care.

Surgery can have complications such as wound-healing problems, infection, numbness from nerve irritation, continued pain, or a slow return to activity. A surgeon can explain the expected benefits and risks for the procedure being considered.

Follow up

Arrange routine follow-up if heel pain is not improving with reduced pressure and activity changes, repeatedly returns, or interferes with work, sleep, exercise, or normal walking. An appointment is also appropriate for a persistent lump, unexplained swelling, or symptoms in both heels, especially when there is a history of gout, psoriasis, inflammatory arthritis, or prolonged morning stiffness.

Seek urgent medical care for:

Emergency care may be needed after major trauma with an obvious deformity, or when severe infection symptoms include confusion, fainting, breathing difficulty, or rapidly worsening illness.

During recovery, activity should usually increase in stages. Pain that becomes progressively worse during activity or remains more intense afterward may mean the load is increasing too quickly. Footwear and training habits should also be reviewed to reduce repeated irritation.

- Rapidly increasing redness, warmth, or swelling
- Drainage from the skin near the painful area
- Fever or feeling unwell with a red, painful heel
- Inability to bear weight after an injury
- A sudden pop followed by weakness or difficulty pushing off the foot
- Significant heel pain in a person with a foot wound, poor circulation, or reduced sensation

Sources

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