CONDITION

Bursitis

Learn how bursitis causes pain and swelling around joints, what can trigger it, how clinicians diagnose it, and which treatments and warning signs matter.

WHAT IT IS
Inflammation or irritation of a bursa

BODY SYSTEM
Bones, muscles and joints

MAIN SYMPTOMS
Joint pain, tenderness, swelling, difficulty moving

WHAT CAUSES IT
Repeated friction, pressure, injury or infection

HOW IT IS DIAGNOSED
Clinical examination, sometimes bursal fluid aspiration

MAIN TREATMENT
Conservative care, antibiotics for septic bursitis

CAN IT BE CURED?
Yes, most cases improve with treatment

IS IT AN EMERGENCY?
Sometimes, with confusion, fainting or breathing difficulty

LONG-TERM OUTLOOK
Usually improves without lasting damage, with possible recurrence

Overview

Bursitis is inflammation or irritation of a bursa. A bursa is a small, fluid-filled sac that cushions areas where skin, muscles, or tendons move over bone. The body has many bursae, especially near joints that move often or bear pressure.

Bursitis commonly affects the shoulder, elbow, hip, knee, or heel. It may develop after repeated movement, prolonged pressure, an injury, or an infection. Some inflammatory conditions, including gout and rheumatoid arthritis, can also increase the chance of bursitis.

Symptoms may begin suddenly or build over time. The affected area can be painful, tender, swollen, or difficult to move. Most cases improve with activity changes and other conservative care. However, bursitis caused by bacteria, called septic bursitis , needs prompt medical treatment.

Some names commonly used for bursitis do not describe the whole problem. For example, pain once called "hip bursitis" may involve nearby tendons as well as the bursa. Clinicians often call this greater trochanteric pain syndrome . An evaluation helps identify which tissues are involved and whether another condition is causing the pain.

Symptoms

The main symptom is pain near a joint. Pain may occur with movement, direct pressure, or both. It may feel aching, sharp, or burning, depending on the location and cause.

Bursitis near the skin, such as at the tip of the elbow or front of the kneecap, may cause visible swelling. The area may feel soft or fluid-filled. Deeper bursae, such as those around the shoulder or hip, usually do not cause visible swelling.

Common symptom patterns include:

Redness, warmth, increasing tenderness, drainage, or fever may suggest an infected bursa. Infection is more common in bursae close to the skin, particularly at the elbow and knee.

Seek prompt medical care for a hot, red, or rapidly swelling area, especially if there is fever, chills, a recent cut, a puncture wound, or drainage. A person who appears severely ill, becomes confused, faints, or has trouble breathing needs emergency care.

- Shoulder: Pain when raising the arm, reaching overhead, or lying on the affected side.
- Elbow: Swelling at the tip of the elbow, with or without pain.
- Hip: Pain along the outside of the hip or upper thigh, often worse with walking, climbing stairs, or lying on that side.
- Knee: Swelling and tenderness over the kneecap, especially after kneeling.
- Heel: Pain near the back of the heel, sometimes made worse by shoes or activity.

Causes and risk factors

Bursitis often results from repeated friction or pressure. Repetitive throwing may irritate a shoulder bursa. Frequent kneeling can affect the bursa in front of the kneecap, while leaning on the elbows can irritate the bursa at the tip of the elbow.

A direct impact may cause bleeding or inflammation inside a bursa. Symptoms may appear soon after the injury or develop as swelling increases.

Other causes and risk factors include:

Age-related changes can make some areas more sensitive to repetitive stress, but bursitis can occur at any age. Work, sports, hobbies, footwear, and mobility patterns may all contribute.

Not every pain near a joint is bursitis. Arthritis, tendon injuries, muscle strains, fractures, nerve problems, and referred pain from the spine can produce similar symptoms.

- A sudden increase in exercise, work, or another repeated activity
- Poor movement mechanics or muscle weakness
- Tight muscles or tendons that increase friction around a joint
- Long periods of pressure on an elbow, knee, or hip
- A nearby wound, skin infection, injection, or puncture
- Gout or other conditions that cause crystals to collect in tissues
- Rheumatoid arthritis and certain other inflammatory diseases
- Diabetes, immune system problems, or medicines that reduce immune function, which may increase infection risk

Diagnosis

A clinician usually begins by asking when the pain started, what activities make it worse, and whether there was an injury or change in activity. Questions about fever, skin wounds, gout, inflammatory arthritis, and previous episodes can help identify the cause.

During the examination, the clinician may check for swelling, warmth, redness, tenderness, and range of motion. The location of pain and the movements that trigger it can help distinguish bursitis from tendon, joint, or nerve problems.

Imaging is not always needed. An X-ray does not show a bursa clearly, but it may identify a fracture, arthritis, a bone spur, or calcium deposits. Ultrasound can show fluid and inflammation and may guide a needle during aspiration or injection. MRI may be considered when symptoms are unclear, persistent, or possibly related to another soft-tissue condition.

Aspiration means removing some bursal fluid with a needle. It may be performed when infection, gout, or another crystal-related condition is suspected. The fluid can be checked for bacteria, white blood cells, blood, and crystals. Blood tests may also be useful when there are signs of infection or a broader inflammatory illness.

Because septic bursitis can resemble noninfectious bursitis, redness and warmth should not be assessed by symptoms alone when infection is a concern.

Treatment and management

Treatment depends on the location, cause, severity, and whether infection is present. The first goal in noninfectious bursitis is usually to reduce irritation while maintaining safe movement.

Helpful early measures may include:

Complete rest for a long period is usually not helpful because it can lead to stiffness and weakness. A clinician or physical therapist may recommend exercises to restore movement, strengthen nearby muscles, and improve body mechanics. For hip symptoms, treatment often includes the muscles and tendons around the hip rather than focusing only on the bursa.

Over-the-counter pain medicines may help some people. Acetaminophen can reduce pain but does not treat inflammation. Nonsteroidal anti-inflammatory drugs like ibuprofen or naproxen , or NSAIDs, such as ibuprofen or naproxen, can reduce pain and inflammation. These medicines are not appropriate for everyone and can affect the stomach, kidneys, heart, or bleeding risk. A pharmacist or clinician can help determine whether they are safe alongside existing health conditions and medicines. Follow the product label unless a clinician gives different instructions.

A corticosteroid injection may be considered for selected cases of noninfectious bursitis that do not improve with simpler measures. The medicine is placed near or into the affected bursa to reduce inflammation. Benefits and risks vary by location. Repeated injections can damage nearby tissue, and an injection should not be used as a substitute for treating the activity or movement pattern that caused the irritation. Clinicians generally avoid corticosteroid injection when infection is suspected.

Septic bursitis requires antibiotics like amoxicillin or doxycycline . A clinician may also remove fluid for testing or to reduce swelling. Some people need repeated drainage, intravenous antibiotics, or hospital care, depending on the infection and their overall health. Surgery is uncommon but may be considered for an infection that does not respond to other treatment or for persistent, repeatedly troublesome bursitis.

If gout, rheumatoid arthritis, or another medical condition is contributing, managing that condition can help reduce further episodes. Workplace changes, protective pads, well-fitting footwear, and gradual training increases may reduce repeated irritation.

- Temporarily reducing movements or positions that trigger pain
- Protecting the area from pressure with padding or changes in technique
- Applying a wrapped cold pack for brief periods
- Avoiding forceful stretching or repeatedly "testing" a painful movement

- Gradually returning to activity as pain and movement improve

Complications

Most noninfectious bursitis improves without lasting damage. Symptoms can become persistent or return if pressure, repetitive movement, muscle weakness, or another underlying cause is not addressed.

Ongoing pain may limit sleep, work, exercise, or joint movement. Avoiding movement for too long can add stiffness and weakness. Repeated aspiration or injection can introduce infection, although clinicians use sterile techniques to lower this risk.

Septic bursitis can spread into nearby skin or other tissues. Rarely, infection can enter the bloodstream or involve deeper structures. Prompt assessment and treatment reduce this risk.

Surgery, when needed, has its own risks, including infection, wound-healing problems, and recurrence. A surgeon can explain these risks in relation to the affected bursa and the reason for the procedure.

Follow up

Arrange routine follow-up if symptoms are not improving after activity changes and basic self-care, keep returning, disturb sleep, or interfere with normal movement. Follow-up is also appropriate if the diagnosis is uncertain or there is ongoing weakness, numbness, or loss of motion.

After an injury, seek medical assessment sooner if there is severe pain, marked swelling, deformity, inability to use the limb normally, or concern for a fracture.

Contact a clinician promptly for:

Emergency care is appropriate for severe illness, confusion, fainting, breathing difficulty, or other signs that an infection may be affecting the whole body.

During recovery, increase activity gradually. If symptoms return, review recent changes in exercise, work tasks, footwear, or pressure on the area. A physical therapist, occupational health clinician, or sports medicine professional may help adjust technique and reduce repeated stress.

- New or spreading redness and warmth
- Rapidly increasing swelling or pain

- Fever, chills, pus, or drainage
- A skin wound near the swollen bursa
- Symptoms that develop while the immune system is weakened

Sources

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