Tendinitis (Bursitis)

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Tendinitis or bursitis often involves the shoulder, elbow, wrist, hip, knee and ankle. The pain it causes may be quite severe and often occurs suddenly. As in arthritis, the pain is worse during movement. Unlike arthritis, the pain is often in parts of the body far from a joint.

Tendinitis often results from repetitive use (overuse). Though the problem can recur or be chronic (long term) in some people, it is most often short term, mainly if treated early.

Fast Facts

- Tendinitis and bursitis are inflammation or degeneration (breakdown) of the soft tissue around muscles and bones.
- Immediate treatment includes RICE: **R**est, **I**ce, **C**ompression and **E**levation.
- Danger signs include rapid worsening of pain, redness and swelling, or sudden inability to move a joint.

What is tendinitis?

Tendons are cord-like structures located where a muscle narrows down to attach to a bone. The tendon is more fibrous and dense than the elastic, fleshy muscle. A tendon transmits the pull of the muscle to the bone to cause movement. Tendinitis is often very tender to the touch.

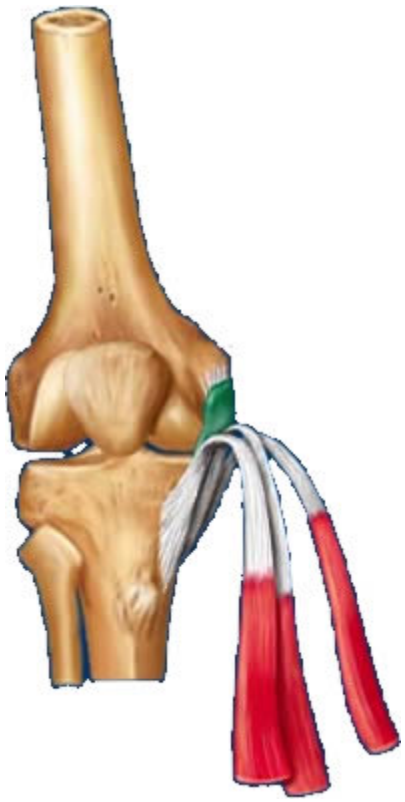
What is bursitis?

Bursitis is inflammation of a bursa. This small sac acts as a cushion between moving structures (bones, muscles, tendons or skin). If a muscle or tendon is pulling around a corner of a bone, or over a bone, a healthy bursa protects it from fraying and stress. When a bursa is inflamed, it becomes very painful, even during rest.

What causes tendinitis and bursitis?

Tendinitis can occur from a sudden intense injury. Most often, though, it results from a repeated, minor injury of that tendon. Doctors call this repetitive stress or overuse. For example:

- Painting a ceiling for four hours or more, typing long hours, improper body position while using a keyboard, chopping, cutting or sawing may result in tendinitis or bursitis hours or days later.
- Tight clenching while using hand tools or while driving a long time.
- Using a backhand, mainly single handed, in an early-season game of tennis ("tenniselbow").
- Wearing improper running shoes or not getting the proper training before sports.



Green part of image illustrates the anserine bursa of the knee, which becomes inflamed in bursitis. Tendons (white) connect the muscles (red) to insert onto bone, above the bursa.

To prevent these overuse injuries, follow the tips in the Joint Protection Table.

Persons with gout, pseudogout, or blood or kidney diseases often develop bursitis as part of that disease. Older persons are more prone to get tendinitis and bursitis.

Rarely, some drugs can cause tendinitis and tendon rupture (spontaneous tear). These include fluoroquinolone antibiotics and statins (drugs that lower cholesterol).

How are tendinitis and bursitis diagnosed?

To determine the cause of these problems, a health care provider asks about your medical history and does a careful physical exam. Tenderness along the tendon or its sheath (outer covering), or at one specific point in the tendon, suggests tendinitis. Pain occurs when the muscle to which the tendon is attached is worked against resistance as part of the exam.

Most patients at first do not need imaging tests like X-rays, magnetic resonance imaging (often referred to as MRI) or ultrasound scans. Imaging and blood tests are done only if the problem recurs or does not go away. A blood test also can help detect an infection. Signs of an infection include redness, warmth and swelling. If bursitis is the result of infection, fluid must be drained from the bursa at once and promptly studied.

How are tendinitis and bursitis treated?

Treatment depends on the cause. In overuse or injury, you must reduce the causing force or stress. If tendinitis is job related, the doctor or physical therapist should review proper ergonomics, so you can work safely. Some patients may need joint protection advice and support of the involved region. There is little proof that therapeutic ultrasound helps these problems, and most doctors do not recommend it.

Treatment can consist of any of the following.

Rest. You should rest the injured limb or joint, at least for a short time. Failure to rest it will most likely continue your symptoms. If the problem is in a hip, leg or foot, you may need to stop stressful weightbearing activities for a short time. This lets the inflammation lessen.

Ice. Ice may help reduce inflammation and pain. Ice the area for 10–15 minutes once or twice a day.

Medicine. If your pain persists, you may need nonsteroidal anti-inflammatory drugs—often referred to as NSAIDs—such as aspirin, ibuprofen or naproxen. Topical (applied to the skin) forms of NSAIDs are now available and may reduce pain and inflammation without stomach upset. Acetaminophen (Tylenol) also can help relieve pain.

Coricosteroid injections may provide short-term benefit in certain forms of tendinitis, and may be considered if you are unable to take NSAIDs.

If an infection is present, you most often will need a proper antibiotic. (Daily drainage of fluid with a needle also may be needed.)

If crystals of gout are found in joint fluid, there is medicine that controls the disease.

Supports. Use of a cane in the opposite hand can help a painful hip. Splints or braces for the affected body part help rest and reduce stress on the body. Off-the-shelf supports may be enough. If not, you may need custom-made braces and referral to an occupational therapist.

For ankle tendinitis, you may need orthotics to reduce the stress at the ankle or in the foot. An orthotic is a device that goes inside the shoe, which changes the support and the angle of the foot. This improves foot mechanics and relieves pain or pressure. They can be custom made or off the shelf.

Physical therapy. Some tendon problems do not go away despite standard treatment. If tendinitis lasts beyond a few weeks, you may need a referral to a physical therapist or a rheumatologist. The doctor or therapist can give you exercises to do that will maintain strength and function. If the tendinitis or bursitis has begun to limit joint movement, or already restricts movement, seeing a physical therapist is wise. For instance, if pain in a shoulder has gone away, but you can no longer raise your arm as high as your healthy arm, a "frozen shoulder" or other rotator cuff problems are developing. You can prevent this problem with early treatment.

Surgery. If, after a few months of treatment, tendinitis still limits an essential activity, you may want to consider surgery. Ask your doctor to refer you to an experienced orthopaedic surgeon.

Some patients with an infection or adhesions of the tendon or bursa may need a cortisone injection or an operation.

A possibly serious complication of tendinitis is rupture of a tendon. The most common rupture is a tear of the Achilles tendon in the lower calf. It most often needs surgery.

Prevention

There are ways you can prevent these problems from occurring. These tips apply to all joints:

- Before strenuous exercise, warm up and stretch.
- Properly train for a new activity. Slowly increase the intensity of your workout.
- Engage in exercise and sports daily or near daily rather than just on weekends.
- Learn and maintain proper posture and body mechanics.
- Make sure sports equipment is the right size and fit for you, and designed for the sport you are doing.
- Avoid staying in one position for too long. Take rest breaks or change positions every 20–40 minutes.
- Stop any activity that causes pain.
- Avoid compulsive behavior, like "I'm going to finish this job even if it kills me!"

The Table shows how to protect certain joints.

Table: Joint Protection

Shoulder	• Face an object you are reaching for, rather than reaching sideways or backward. • Rise from a chair by pushing off with your thigh muscles, not your shoulders or hands. • Do pushups from the wall, not the floor. • When reaching for a heavy object overhead, keep the load centered in front of you and use both hands.
Elbow and wrist	• Recognize and avoid hand clenching or gripping tools or other objects too hard. Use power tools. In the kitchen, use aids such as jar openers. Pad your car steering wheel. • Use your stomach muscles to help roll over when getting out of bed. • Avoid carrying heavy items in one hand or at the side of your body.
Knee and ankle	• Avoid sitting with a leg folded under. • Wear shoes that give support and comfort, with room for the toes to extend fully during weightbearing. • Check shoes often for signs of wear, and replace them when worn. • If you walk or stand on concrete, cushion the inside bottom of your shoes with pads or wear walking or running shoes with cushioned soles. • Keep leg muscles strong. Do leg lifts with ankle weights (5–20 pounds) while seated.

What is the broader health impact of tendinitis and bursitis?

Tendinitis or bursitis in the shoulder can become a greater problem if the shoulder becomes stiff. It is important to do range of motion exercises, such as stretching, each day. This preserves movement in the shoulder joint.

Living with tendinitis or bursitis

Tendinitis or bursitis can be painful. Seek medical attention early to prevent joint stiffness and chronic problems that may follow. It also is important to rest the limb or the joint, at least until movement is free of pain. Failure to rest it most often delays full healing.

Points to remember

- Rest the painful tendon. Avoid heavy activity or any activity that causes pain.
- Ice the area for 10–15 minutes once or twice a day.
- Seek medical help at once if pain worsens, if redness and swelling appear or if the problem does not improve in 3–6 weeks.
- Avoid overuse of any part of the body, such as doing the same motion over and over.
- Warm up by exercising at a relaxed pace before doing more strenuous activity.

To find a rheumatologist

For more information about rheumatologists, click here.

Learn more about rheumatologists and rheumatology health professionals.

For additional Information

The American College of Rheumatology has compiled this list to give you a starting point for your own additional research. The ACR does not endorse or maintain these web sites, and is not responsible for any information or claims provided on them. It is always best to talk with your rheumatologist for more information and before making any decisions about your care.

The Arthritis Foundation

www.arthritis.org

National Institute of Arthritis and Musculoskeletal and Skin Diseases Information Clearinghouse

www.niams.nih.gov

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