

Tendonitis

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General information about tendonitis

What is a tendon?

A tendon is a tough yet flexible band of fibrous tissue. The tendon is the structure in your body that [connects your muscles to the bones](#). The skeletal muscles in your body are responsible for moving your bones, thus enabling you to walk, jump, lift, and move in many ways. When a muscle contracts it pulls on a bone to cause movements. The structure that transmits the force of the muscle contraction to the bone is called a tendon.

Tendons come in many shapes and sizes. Some are very small, like the ones that cause movements of [your fingers](#), and some are much larger, such as your [Achilles tendon](#) in your heel. When functioning normally, these tendons glide easily and smoothly as the muscle contracts.

What is tendonitis?

Sometimes the tendons become inflamed for a variety of reasons, and the action of pulling the muscle becomes irritating. If the normal smooth gliding motion of your tendon is impaired, the tendon will become inflamed and movement will become painful. This is called **tendonitis**, and literally means inflammation of the tendon.

What causes tendonitis?

The most common cause of tendonitis is overuse. Commonly, individuals begin an exercise program, or increase their level of exercise, and begin to experience symptoms of tendonitis. The tendon is unaccustomed to the new level of demand, and this overuse will cause an inflammation and tendonitis.

Another common cause of symptoms of tendonitis is due to age-related changes of the tendon. As people age, the tendons lose their elasticity and ability to glide as smoothly as they used to. With increasing age, individuals are more prone to developing symptoms of tendonitis. The cause of these age-related changes is not entirely understood, but may be due to changes in the blood vessels that supply nutrition to the tendons.

Sometimes, there is an anatomical cause for tendonitis. If the tendon does not have a smooth path to glide along, it will be more likely to become irritated and inflamed. In these unusual situations, surgical treatment may be necessary to realign the tendon.

How is tendonitis diagnosed?

Tendonitis is almost always diagnosed on physical examination. Findings consistent with tendonitis include:

- Tenderness directly over the tendon
- Pain with movement of muscles and tendons
- Swelling of the tendon

Are X-rays or MRIs needed to diagnose tendonitis?

Studies such as x-rays and MRIs are not usually needed to make the diagnosis of tendonitis. While they are not needed for diagnosis of tendonitis, x-rays may be performed to ensure there is no other problem, [such as a fracture](#), that could be causing the symptoms of pain and swelling. X-rays may show evidence of swelling around the tendon.

MRIs are also good tests identify swelling, and will show evidence of tendonitis. However, these tests are not usually needed to confirm the diagnosis; MRIs are usually only performed if there is a suspicion of another problem.

Related Tendonitis Information:

- [Wrist Tendonitis](#)
Wrist tendonitis is a common problem that can cause pain and swelling around the wrist. Wrist tendonitis is due to inflammation of the tendon sheath. Treatment of wrist tendonitis usually does not require surgery.
- [Achilles Tendonitis](#)
Achilles tendonitis causes pain and swelling in the back of the heel. Understanding this common problem can help with treatment and help to avoid serious complications such as Achilles tendon rupture.
- [Patellar \(Kneecap\) Tendonitis](#)
Patellar tendonitis, or inflammation of the patellar tendon, is a condition often called Jumper's Knee. Treatment of patellar tendonitis usually consists of rest and anti-inflammatory medication.
- [Rotator Cuff Tendonitis](#)
Many patients who have pain are told by their doctor they have shoulder bursitis or rotator cuff tendonitis; learn more about rotator cuff tendonitis and available treatments.

What is the treatment of tendonitis?

Below is some advice for tendonitis treatment and avoiding recurrences of this problem. As with any treatment program, talk with your doctor before you begin tendonitis treatment! In order to aid healing you should:

- **Rest and Protect The Area**

Tendonitis treatment must begin by avoiding aggravating movements. This may mean taking a break from a favorite activity for a period of time, but this is a necessary step to allow the inflamed tendon to heal. It is also recommended in tendonitis treatment to try alternative activities; for example, if you are a runner who is experiencing knee pain due to tendonitis, try incorporating swimming into your workout schedule. Often a splint or brace will be prescribed to help protect the area.

- **[Apply an Ice Pack](#)**

Icing the area of inflammation is an important aspect of tendonitis treatment.

The ice will help to control the inflammation and decrease swelling. By minimizing inflammation and swelling, the tendon can return to its usual state and perform its usual function.

- **[Take Anti-Inflammatory Medications](#)**

Nonsteroidal anti-inflammatory medications (NSAIDs) include a long list of possibilities such as Ibuprofen, Motrin, Naprosyn, Celebrex, and many others.

Tendonitis treatment can be improved by these medications that will decrease pain and swelling. Be sure to talk to your doctor before starting these medications.

- **[Cortisone Injections](#)**

If the symptoms of tendonitis are persistent, an injection of cortisone may be considered. Cortisone is a powerful anti-inflammatory medication, but instead of being given by mouth, it is injected directly to the site of inflammation. This can be extremely helpful for situations that are not improved with rest.

Not all types of tendonitis can be addressed with cortisone injections! For example, Achilles tendonitis is rarely injected with cortisone because of concerns about possible rupture of the tendon.

To prevent the return of tendonitis symptoms:

- **[Strengthening and Physical Therapy](#)**
Proper strengthening technique can help you avoid tendonitis by using your muscles in a safe, more efficient manner. For example, patients with rotator cuff tendonitis can learn ways to move the shoulder that will not cause inflammation. *Do not begin exercises until the inflammation of tendonitis has resolved!*
- **Take Breaks**
Alternate repetitive tasks with breaks to relieve stress on the tendons. Don't perform one activity continuously for hours at a time. For those with exercise-related tendonitis, try to vary your workouts to relieve the repetitive stress of one exercise activity.
- **Protect the Tendons**
Some patients who have chronic tendonitis will find relief by protecting the affected area when performing certain activities. For example, [wrist splints](#) can be worn while gardening, or [Chopat straps](#) (patellar tendonitis) can be worn while playing sports.

The steps listed above are usually adequate tendonitis treatment, and most patients have resolution of their symptoms. Learning to avoid activities that may cause a tendonitis flare-up can also be important.

Tendonitis due to underlying conditions such as arthritis and gout are more difficult to treat and recur more frequently. The best management in these situations is to do your best to avoid flare-ups of gouty attacks or arthritic episodes, and to avoid activities which you have learned cause tendonitis.

References:

- Almekinders, LC. "[Tendinitis and other chronic tendinopathies](#)" J. Am. Acad. Ortho. Surg., May 1998; 6: 157 - 164.