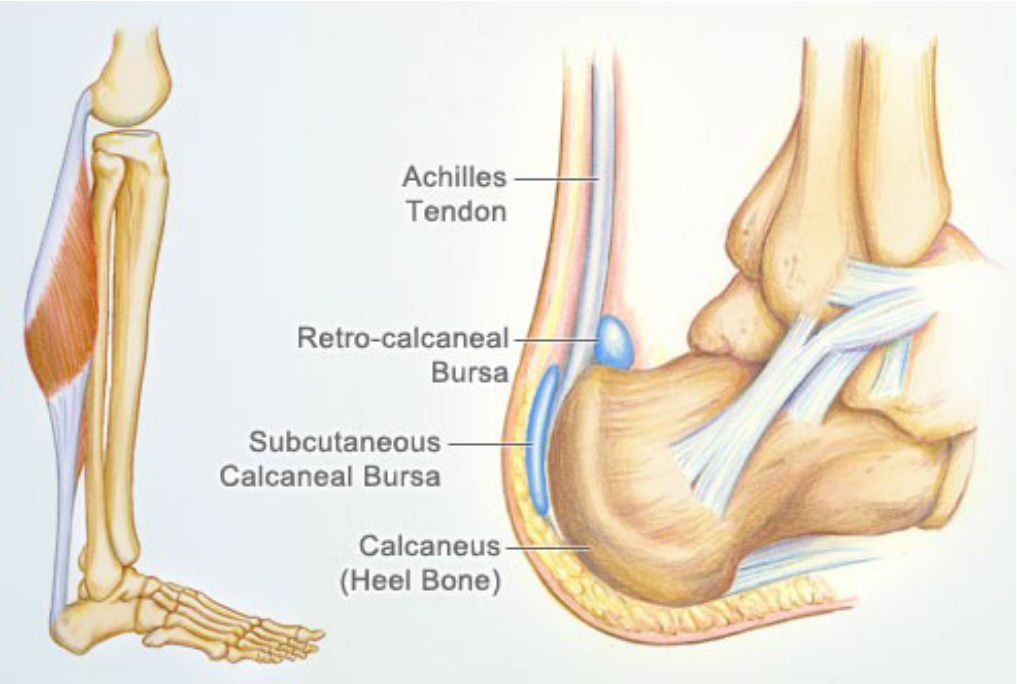
Achilles tendon

The Achilles tendon connects the calf muscle to the heel bone. It lets you rise up on your toes and push off when you walk or run.



Problems with the Achilles tendon may seem to happen suddenly. But usually they are the result of many tiny tears to the tendon that have happened over time.

Achilles tendinopathy. Achilles tendinopathy includes one of two conditions:

- Tendinitis. This actually means "inflammation of the tendon," but inflammation is rarely the cause of tendon pain.
- Tendinosis. This refers to tiny tears (microtears) in the tissue in and around the tendon

caused by overuse. In most cases Achilles tendon pain is the result of tendinosis, not tendinitis. Some experts now use the term tendinopathy to include both inflammation and microtears. But many doctors may still use the term tendinitis to describe a tendon injury.

Achilles tendon tear or rupture. An Achilles tendon also can partially tear or completely tear (rupture). A partial tear may cause mild or no symptoms. But a complete rupture causes pain and sudden loss of strength and movement.

Achilles or heel (calcaneal) bursitis: Low-riding shoes can irritate the bursa, a sac of fluid cushioning the Achilles tendon at the heel. Pain in the back of the heel, worse with shoes on, is the common symptom.

Symptoms

Achilles tendon problems are most often caused by overuse or repeated movements. These movements can happen during sports, work, or other activities. Being out of shape or not warming up before exercising may also cause Achilles tendon problems. So can shoes with poor arch supports or rigid heels.

Symptoms of Achilles tendon problems include swelling in the ankle area and mild or severe pain. The pain may come on gradually or may only occur when you walk or run. You may have less strength and range of movement in the ankle.

A rupture of the Achilles tendon may cause a sudden, sharp pain. Most people feel or hear a pop at the same time. An Achilles rupture is most often caused by a sudden, forceful motion that

stresses the calf muscle. This can happen during an intense athletic activity or even during simple running or jumping. Swelling and bruising may occur, and you may not be able to walk efficiently, point your foot down or stand on your toes.

Diagnosis

The doctor will perform a physical exam to see if a tendon is tender, swollen and preserves its integrity. X-rays are often needed to evaluate the heel bone. In some cases, a Ultrasound or MRI may be needed

Treatment

An Achilles tendon rupture may be treated with surgery and rehabilitation or by using a cast, splint, brace, walking boot, or other device that will keep your lower leg from moving (immobilization) and rehabilitation. Consider the following when making your decision:

- Both surgery and immobilization are usually successful. Another rupture is less likely after surgery than after immobilization, but immobilization has fewer complications.
- If you are younger and/or active, surgery is often recommended.
- If you are older and/or inactive, immobilization is often recommended.

Regardless the treatment type, full recovery might take from 6 weeks up to 6 months.

Prevention

Prevention can be as simple as wearing the right shoes or as complicated as extensive training for athletes.

- Wear proper shoes for the activity. Always wear stable shoes that give your proper support. High-top basketball shoes, high heels or platform shoes are a good choice
- Keep the calf strong and flexible. Consult with physical therapist for strengthening exercises.
- When participating in a sport, consider having calf taping, as taping offers extra support.
- Wearing an ankle brace while playing may also help.
- Make sure a playing field (or home environment) is clear of any holes or obstacles to help avoid injury.
- Prior to any sport activity, take some time for warm-up and make stretching exercises afterwards.