

Achilles Tendon

The Achilles tendon, the largest and single strongest tendon in the body, connects the heel bone to the muscles in the back of your leg and thigh. The primary function of the Achilles tendon is to transmit the power of these muscles to the foot enabling walking and running.

Why do Achilles tendon injuries occur?

Achilles tendon injuries can occur especially when the tendon is subjected to strong forces such as in velocity sports: running, soccer, basketball, tennis, and baseball. Additionally, aging, and the Achilles tendons poor blood supply also increases your chance of injury. The area of the tendon with the poorest blood supply is the area (2 to 6 cm) just above its insertion into the heel bone. The blood flow to this area decreases as you get older. This means, older active individuals are more vulnerable to injury and need especially to take precautions such as wearing appropriate athletic gear, and doing proper stretching.

People who over pronate , (flattening of the arch, turning out of the heels and splaying outward of the forefoot) can especially develop in unstable shoe gear foot pain as well as, [Achilles tendinitis](#) and [Achilles tendonosis](#), two common overuse disorders that occur in the Achilles tendon, [bunions](#), [hammertoes](#), [plantar fasciitis](#) , [shin splints](#) and knee pain.

Athletes and laborers who routinely put added stresses on their feet are vulnerable to Achilles tendon injuries. Weekend warriors, who are not in proper condition and infrequently, participate in

athletic activities also are at greater risk for Achilles tendon injuries.

Injury to the Achilles tendon can be sudden or gradual and the healing course can be lengthy. A careful history and physical by your doctor is needed to make the correct diagnosis and choose the right treatment plan.

Symptoms

If you experience pain, tenderness, swelling or stiffness anywhere along the tendons path you may have Achilles tendonitis or Achilles tendonosis. [FootPhysicians.com](#), the website affiliated with the

American College of Foot and Ankle Surgeons gives an excellent review of these conditions. Our staff Podiatric Physicians routinely evaluate for these conditions or a more severe ailment such as an Achilles tendon rupture. Someone with this condition, often found in men 30 to 50 years old, may have experienced the feeling like someone stepped on the back of their ankle or that a popping sound was heard or felt. Persons often with Achilles tendon partial or full ruptures may bear weight but have difficulty pushing off it. This is a serious condition which requires prompt diagnosis and treatment by your Physician.

Upon examining your foot and ankle, our NY Podiatric Physicians and Surgeons will evaluate the range of motion of your ankle, palpate for tenderness and assess the thickness and consistency of the tendon as compared with the alternate foot and ankle. We do in office testing such as X-Rays, Diagnostic Ultrasound or order an MRI to further diagnose the extent of the injuries.

Treatment

The mainstay of treatment for tendonitis or tendinosis is ice, rest and nonsteroidal anti-inflammatory drugs, but physical therapy, orthotic inserts and surgery may be needed in recalcitrant cases. In patients with tendon rupture, casting or surgery is required. Appropriate treatment of Achilles tendon injuries often leads to full recovery.