JONES FOOT & ANKLE

FOOT FACTS

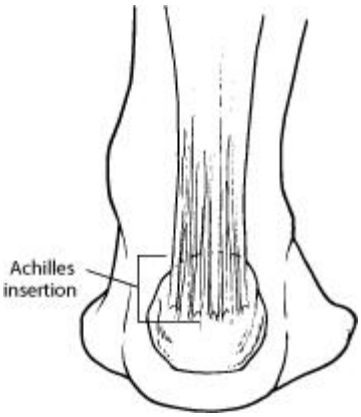
STEWART JONES, DPM

www.jonesfootandankle.com | 208-404-2262

Achilles Tendon Disorders

What is the Achilles Tendon?

The Achilles tendon – where Achilles tendon disorders occur - is the band of tissue that runs down the back of the lower leg, connecting the calf muscle to the heel bone. Also called the heel cord, the Achilles tendon facilitates walking by helping to raise the heel off the ground.



Achilles Tendinitis and Achilles Tendinosis

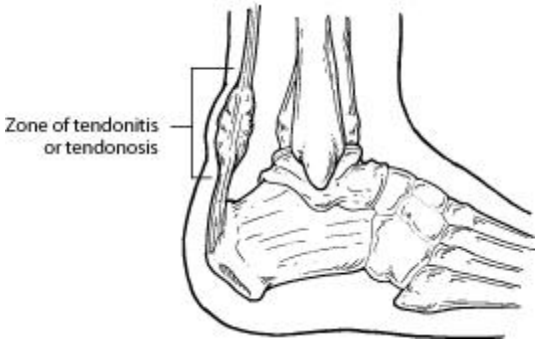
Two common disorders that occur in the heel cord are Achilles tendinitis and Achilles tendinosis.

Achilles tendinitis is an inflammation of the Achilles tendon. This inflammation is typically short-lived. Over time, if not resolved, the condition may progress to a degeneration of the tendon (Achilles tendinosis), in which the tendon loses its organized structure and is likely to develop microscopic tears. Sometimes the degeneration involves the site where the Achilles tendon attaches to the heel bone. In rare cases, chronic degeneration with or without pain may result in rupture of the tendon.

Causes of Achilles Tendon Disorders

As "overuse" disorders, Achilles tendinitis and tendinosis are usually caused by a sudden increase of repetitive activity involving the Achilles tendon. Such activity puts too much stress on the tendon too quickly, leading to micro-injury of the tendon fibers. Due to this ongoing stress on the tendon, the body is unable to repair the injured tissue. The structure of the tendon is then altered, resulting in continued pain.

Athletes are at high risk for developing disorders of the Achilles tendon. Achilles tendinitis and tendinosis are also common in individuals whose work puts stress on their ankles and feet, such as laborers, as well as in “weekend warriors”—those who are less conditioned and participate in athletics only on weekends or infrequently.



In addition, people with excessive pronation (flattening of the arch) have a tendency to develop Achilles tendinitis and tendinosis due to the greater demands placed on the tendon when walking. If these individuals wear shoes without adequate stability, their overpronation could further aggravate the Achilles tendon.

Symptoms of Achilles Tendon Disorders

The symptoms associated with Achilles tendinitis and tendinosis include:

- Pain—aching, stiffness, soreness, or tenderness—within the tendon. This may occur anywhere along the tendon’s path, beginning with the tendon’s attachment directly above the heel upward to the region just below the calf muscle. Pain often appears upon arising in the morning or after periods of rest, then improves somewhat with motion but later worsens with increased activity.

- Tenderness, or sometimes intense pain, when the sides of the tendon are squeezed. There is less tenderness, however, when pressing directly on the back of the tendon.
- When the disorder progresses to degeneration, the tendon may become enlarged and may develop nodules in the area where the tissue is damaged.

Diagnosis of Achilles Tendon Disorders

In diagnosing Achilles tendinitis or tendinosis, the surgeon will examine the patient's foot and ankle and evaluate the range of motion and condition of the tendon. The extent of the condition can be further assessed with x-rays or other imaging modalities.

Treatment of Achilles Tendon Disorders

Treatment approaches for Achilles tendinitis or tendinosis are selected on the basis of how long the injury has been present and the degree of damage to the tendon. In the early stage, when there is sudden (acute) inflammation, one or more of the following options may be recommended:

- **Immobilization**. Immobilization may involve the use of a cast or removable walking boot to reduce forces through the Achilles tendon and promote healing.
- Ice. To reduce swelling due to inflammation, apply a bag of ice over a thin towel to the affected area for 20 minutes of each waking hour. Do not put ice directly against the skin.
- **Oral medications**. Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, may be helpful in reducing the pain and inflammation in the early stage of the condition.
- **Orthotics**. For those with overpronation or gait abnormalities, custom orthotic devices may be prescribed.
- **Night splints**. Night splints help to maintain a stretch in the Achilles tendon during sleep.
- **Physical therapy**. Physical therapy may include strengthening exercises, soft-tissue massage/mobilization, gait and running re-education, stretching and ultrasound therapy.

When is Surgery Needed?

If nonsurgical approaches fail to restore the tendon to its normal condition, surgery may be necessary. The foot and ankle surgeon will select the best procedure to repair the tendon, based on the extent of the injury, the patient's age and activity level, and other factors.

Prevention

To prevent Achilles tendinitis or tendinosis from recurring after surgical or nonsurgical treatment, the foot and ankle surgeon may recommend strengthening and stretching of the calf muscles through daily exercises. Wearing proper shoes for the foot type and activity is also important in preventing recurrence of the condition.

Why choose a foot and ankle surgeon?

Foot and ankle surgeons are the leading experts in foot and ankle care today. As doctors of podiatric medicine – also known as podiatrists, DPMs or occasionally "foot and ankle doctors" – they are the board-certified surgical specialists of the podiatric profession. Foot and ankle surgeons have more education and training specific to the foot and ankle than any other healthcare provider.

Foot and ankle surgeons treat all conditions affecting the foot and ankle, from the simple to the complex, in patients of all ages including Achilles tendon disorders. Their intensive education and training qualify foot and ankle surgeons to perform a wide range of surgeries, including any surgery that may be indicated for Achilles tendon disorders.