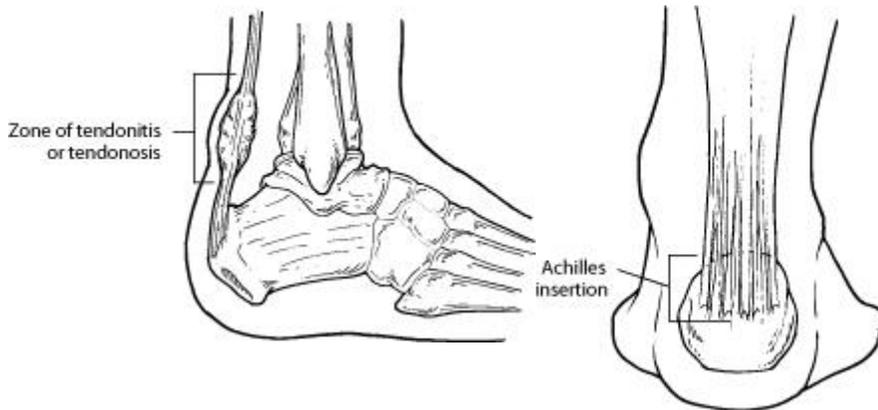


Achilles Tendon Disorders



What is the Achilles Tendon?

A tendon is a band of tissue that connects a muscle to a bone. The Achilles tendon—the longest tendon in the body—runs down the back of the lower leg and connects 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 Tendonitis and Achilles Tendinosis

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

Achilles tendonitis is an inflammation of the Achilles tendon. This inflammation is typically short-lived. Over time the condition usually progresses 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.

Symptoms

The symptoms associated with Achilles tendonitis and tendinosis include:

- Pain—aching, stiffness, soreness, or tenderness—within the tendon. This may occur anywhere along the tendon’s path, beginning with the narrow area directly above the heel upward to the region just below the calf muscle. Often pain 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.

Causes

As “overuse” disorders, Achilles tendonitis and tendinosis are usually caused by a sudden increase of a 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 tendonitis 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 tendonitis and tendinosis due to the greater demands placed on the tendon when walking. If these individuals wear shoes without adequate stability, their over-pronation could further aggravate the Achilles tendon.

Diagnosis

In diagnosing Achilles tendonitis or tendinosis, Dr. Peterson will examine your 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, ultrasound or MRI.

Treatment

Treatment approaches for Achilles tendonitis or tendonosis 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 with a cast or a walking boot, ice, medications, and physical therapy

If non-surgical approaches fail to restore the tendon to its normal condition, surgery may be necessary. Dr. Peterson will discuss the best procedure to repair the tendon.

Prevention

To prevent Achilles tendonitis or tendonosis from recurring after surgical or non-surgical treatment, Dr. Peterson 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.

