Achilles Tendonitis

Inflammation of the Achilles tendon can occur for a number of reasons, including a change in activity, improper shoe wear or trauma. Inflammation of the Achilles tendon causes tightness of the calf muscle, which propagates the condition. Conservative treatment is very effective at resolving Achilles tendonitis, although even with treatment, it may take 6-12 months to fully resolve. However, adhering to the treatment protocol typically results in a 50-75% improvement over the first 4-6 weeks.

Treatment

A supportive tennis shoe is an important component for alleviating Achilles tendonitis. The back of the shoe should be vertical as opposed to angling in towards the heel, as this puts increased pressure on the Achilles tendon. Some brands of shoes, particularly Nike, tend to have backs that dig into the Achilles tendon and continuously aggravate it. The back of the shoe should also be well cushioned.

In addition to an appropriate shoe, a silicon heel cup is placed into the shoe. The heel cup raises the heel just enough to take some strain off of the Achilles tendon. Avoid off-the-shelf gel inserts or heel cups as these quickly compress and don’t provide the cushion and lift that a silicone heel cup does.

A topical anti-inflammatory prescription is also provided. The Achilles tendon has a very limited blood supply, so if oral medications such as Advil or Aleve are used, only about 10% of the medication is delivered to the Achilles tendon. Since there is very little between the skin and the Achilles tendon, approximately 90% of a topical anti-inflammatory reaches the tendon.

Finally, and most importantly, regular calf stretching is vital to resolve Achilles tendonitis. Stretching should be performed before, during and after any prolonged activity including standing or walking. Stretching should also be performed prior to getting out of bed, getting up from a seated position and getting out of the car. Prior to standing, pull your toes of the irritated foot back towards the opposite shoulder and hold for 10-15 seconds. If you have a band, sheet or towel available, you can wrap that around the ball of the foot and pull towards the opposite shoulder to get a better stretch. Immediately upon standing, step your good foot forward and your bad foot back, about hip-width apart. Turn the toes of the injured side inwards to face the heel of your opposite foot, bend your front leg at the knee and keep your back leg straight with the foot flat on the ground. Hold this stretch for 30-45 seconds. In addition to performing this stretch upon standing, perform it also before, during and after any activity.

After a month of the above treatment protocol, patients are re-evaluated. Should the symptoms fail to improve despite adhering to the treatment plan, patients may be issued a night splint to sleep in, which keeps the Achilles tendon stretched throughout the night. Patients may also be referred to Airrosti therapy, where a full body evaluation is performed to determine if something else is contributing to the Achilles tendonitis. Deep tissue manipulation to further loosen the calf may also be performed at Airrosti.
If the addition of a night splint and Airrosti therapy fail to improve symptoms, or in the cases of severe Achilles tendonitis where there is concern for rupture of the tendon, patients may be immobilized in a boot with a heel cup. The tendon will then be evaluated every 2 weeks until symptoms have resolved sufficiently to allow the patient to discontinue use of the boot and return to the initial treatment plan.

In rare instances, even the addition of a boot may fail to improve symptoms. In these cases, patients are immobilized in a walking cast for a period of time and evaluated every 2-3 weeks.

Surgery is reserved for only an extreme minority of cases. In patients with a very large bone spur on the back of the heel, called a Haglund’s deformity, conservative treatment may be ineffective. However, most patients with Haglund’s deformities still respond to conservative treatment. For the few who do not, surgery involves detaching the Achilles tendon from the heel bone (calcaneus), removing the bone spur and reattaching the Achilles tendon. This is an involved procedure that requires over 2 months of immobilization following surgery and extensive physical therapy.