

Achilles tendinitis – A Guide to Diagnosis and Treatment

Achilles tendinitis is a painful and often debilitating inflammation of the Achilles tendon, also known as the heel cord. This large tendon is an extension of the two calf muscles; it runs down the back of the lower leg and attaches to the heel bone or calcaneus. Because it directly connects the strong leg muscles to the foot, the Achilles tendon gives us the ability to rise up on our toes, facilitating the movement that initiates the act of walking.

Causes

Achilles tendinitis is often described as an ailment of athletes. Football and tennis player, runners and dancers are particularly susceptible to this problem because their activities involve sudden stops and starts as well as jumping and other actions that stress the tendon. Women who wear high-heeled shoes often also develop Achilles tendinitis due to the change in heel elevation increasing the load on the tendon. The inflammation that characterizes tendinitis reflects a micro-tearing of the tendon tissue caused by excessive stress. The problem may be caused by a single incident of over-stressing the Achilles-such as when a person fails to stretch or “warm up” sufficiently before exercising – or it may result from an accumulation of smaller stresses that produce numerous small tears over time. Achilles tendinitis may also be due to abnormal foot mechanics. In such people, the arch of the foot flattens too much, causing more twist than normal. The lower leg muscles, the gastrocnemius and the soleus, are over stretched and like a rubber band, the further it stretches, the tighter it becomes. Therefore, the force on the tendon and the heel bone becomes greater than normal, resulting in inflammation and pain.

Overdoing exercise in the beginning can cause tendinitis because the muscles are not flexible enough to withstand the new forces being placed upon them. Therefore, people who are just starting to exercise after a long layoff should stretch properly, start slowly, and increase gradually.

If pain develops even with proper stretching and training techniques, the patient should consult a podiatrist to check for excessive pronation and adequate arch support.

In most cases, the appearance of symptoms is gradual. The discomfort may be relatively minor at first gradually worsening if the patient tries to “work through” the pain.

Treatment options for Achilles Tendinitis include:

- Heel Raises- A simple heel raise in the shoe may decrease the load on the tendon.
- NSAIDs- These anti-inflammatory drugs can be used to reduce inflammation in the tendon, and decrease symptoms.
- Massage- Soft tissue therapy such as transverse friction to the area can be used to decrease inflammation and local pain.
- Orthoses/Arch Supports- By addressing poor foot mechanics and correcting leg alignment the strain on the Achilles tendon can be decreased.
- Tendon Strengthening- Once symptoms have resolved a graduated strengthening program can be used to prevent injury recurrence.
- Stretching- Calf stretching can be used once symptoms have diminished to prevent Achilles tightness and injury recurrence.
- Footwear- Good supportive footwear is an integral part in the rehabilitation of any Achilles injury.