Achilles tendonitis

Summary

- Achilles tendinopathy is a painful syndrome affecting the Achilles tendon (which attaches your calf muscles to your heel bone).
- In most cases, Achilles tendinopathy is an ‘overuse’ injury.
- Treatment includes rest, non-steroidal anti-inflammatory drugs (NSAIDs), physical therapy and avoiding activities that aggravate the condition.

About Achilles tendinopathy

Achilles tendinopathy is a painful condition affecting the Achilles tendon, which attaches the calf muscles to the heel bone. In most cases, Achilles tendinopathy is a type of overuse injury and is more common in younger people. Professional and weekend athletes can suffer from Achilles tendinopathy, but it’s also a common overuse injury in people not involved in sport.

Treatment includes rest, non-steroidal anti-inflammatory drugs (NSAIDs), physical therapy and avoiding activities that aggravate the condition.

Tendons explained

A tendon is a band of connective tissue that anchors muscle to bone. The Achilles tendon is the largest tendon in the body. It attaches the calf muscles to the heel bone (calcaneus) and is very important because it lets you lift your heel when you start to walk. It also helps you to walk, run or stand on tiptoe.

Symptoms of Achilles tendinopathy

Symptoms of Achilles tendinopathy include:

- pain in the back of the heel
- difficulty walking – sometimes the pain makes walking impossible
- swelling, tenderness and warmth of the Achilles tendon.

Degrees of severity of Achilles tendinopathy

Achilles tendinopathy is graded according to how severe it is:

- mild – pain in the Achilles tendon during a particular activity (such as running) or shortly after.
- moderate – the Achilles tendon may swell. In some cases, a hard lump (nodule) may form in the tendon
- severe – any type of activity that involves weight-bearing causes pain of the Achilles tendon. Very occasionally, the Achilles tendon may rupture (tear). When an Achilles tendon ruptures, it is said to feel like a hard whack on the heel.

Causes of Achilles tendinopathy

Some of the causes of Achilles tendinitis include:

- overuse injury – this occurs when the Achilles tendon is stressed until it develops small tears and degeneration. Runners seem to be the most susceptible. People who play sports that involve jumping, such as basketball, are also at increased risk
- arthritis – Achilles tendinitis can be a part of generalised inflammatory arthritis, such as ankylosing
spondylitis or psoriatic arthritis. In these conditions, both tendons can be affected

- **foot problems** – some people with flat feet or hyperpronated feet (feet that turn inward while walking) are prone to Achilles tendinitis. The flattened arch pulls on calf muscles and keeps the Achilles tendon under tight strain. This constant mechanical stress on the heel and tendon can cause inflammation, pain and swelling of the tendon. Being overweight can make the problem worse
- **footwear** – wearing shoes with minimal support while walking or running can increase the risk, as can wearing high heels
- **overweight and obesity** – being overweight places more strain on many parts of the body, including the Achilles tendon
- **quinolone antibiotics** – can in some instances be associated with Achilles tendinopathy or Achilles tendon rupture (tear) soon after exposure to the medication.

**Diagnosis of Achilles tendinopathy**

If you think that you may have Achilles tendinopathy, see your doctor or a physiotherapist. Methods used to make a diagnosis may include:

- medical history, including your exercise habits and footwear
- physical examination, especially examining for thickness and tenderness of the Achilles tendon
- tests that may include an x-ray of the foot, ultrasound and occasionally blood tests (to test for an inflammatory condition), and an MRI scan of the tendon.

**Treatment for Achilles tendinopathy**

The aim of the treatment is to reduce strain on the tendon, prevent further injury and allow repair:

- avoiding or severely limiting activities that may aggravate the condition, such as running
- applying icepacks for 20 minutes per hour while the injury is painful
- take a short course (7-10 days) of **non-steroidal anti-inflammatory drugs** (in consultation with your doctor)
- physical therapy including appropriate warm up and stretch as well as resistant exercises
- using shoe inserts (orthoses) to take pressure off the tendon as it heals. In cases of flat or hyperpronated feet, your doctor or podiatrist may recommend long-term use of orthoses.

Recovery is often slow and will depend on the severity of the condition and how carefully you follow the treatment and care instructions you are given.

The use of injectable agents such as corticosteroid (steroid) injections is not routinely recommended, as there is inconsistent information on their effectiveness and steroid injections into the tendon may cause tendon rupture. You can speak to your doctor for further information.

**Surgery for Achilles tendinopathy**

Surgery is only recommended if all other treatment options have failed. In this situation, badly damaged portions of the tendon may be removed. If the tendon has ruptured, surgery is necessary to re-attach the tendon.

Rehabilitation, including stretching and strength exercises, is started soon after the surgery. In most cases, normal activities can be resumed after about 10 weeks. Return to competitive sport for some people may be delayed for about three to six months.

**Prevention of Achilles tendinopathy**

Suggestions to reduce your risk of Achilles tendinopathy include:

- incorporate stretching into your warm-up and cool-down routines
- maintain an adequate level of fitness for your sport
- avoid dramatic increases in sports training
- if you experience pain in your Achilles tendon, rest the area. Trying to ‘work through’ the pain will only make your injury worse
- wear good quality supportive shoes appropriate to your sport. If there is foot deformity or flattening, obtain

betterhealth.vic.gov.au
Orthoses

- Avoid wearing high heels on a regular basis. Maintaining your foot in a ‘tiptoe’ position shortens your calf muscles and reduces the flexibility of your Achilles tendon. An inflexible Achilles tendon is more susceptible to injury.
- Maintain a normal healthy weight.

Where to get help

- Your GP (doctor)
- Podiatrist
- Physiotherapist
- Exercise physiologist
- ESSA Exercise & Sports Science Australia Tel. (07) 3171 3335

This page has been produced in consultation with and approved by:

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