

What is Achilles Tendinopathy?

Achilles tendinopathy is the more correct description of the condition commonly referred to as Achilles tendonitis and is a relatively common injury characterized by tissue damage and pain in the Achilles region. The muscle group at the back of the lower leg is commonly called the calf and comprises of 2 major muscles one of which originates from above the knee joint (gastrocnemius) the other of which originates from below the knee joint (soleus). Both of these muscles insert into the heel bone via the Achilles tendon. During contraction of the calf, tension is placed through the Achilles tendon. When this tension is excessive due to too much repetition or high force, damage to the tendon occurs. Achilles tendinopathy is a condition whereby there is damage to the tendon with subsequent degeneration and occasionally inflammation. This may occur traumatically due to a high force going through the tendon beyond what it can withstand or due to gradual wear and tear associated with overuse.



Causes of Achilles Tendinopathy

Achilles tendinopathy most commonly occurs due to repetitive or prolonged activities placing strain on the Achilles, typically occurring due to excessive walking, running or jumping activities. Achilles tendinopathy may also occur following a calf or Achilles tear or following a poorly rehabilitated sprained ankle. In athletes, Achilles tendinopathy is commonly seen in running sports such as marathon, triathlon, football and athletics.

Signs and Symptoms of Achilles Tendinopathy

Patients with Achilles tendinopathy typically experience pain in the region of the heel and back of the ankle. In less severe cases of Achilles tendinopathy, patients may only experience pain with rest following activities requiring contraction of the calf muscle such as running, jumping, and hopping etc. In these instances, patients with Achilles tendinopathy may also experience pain and stiffness upon waking the following morning. As the condition progresses, patients may also experience pain during these activities.

Contributing factors to the development of Achilles Tendinopathy

There are several factors which can predispose patients to developing Achilles tendinopathy. These need to be assessed and corrected with direction from a physiotherapist. Some of these factors include:

- joint stiffness (particularly the ankle)
- muscle tightness (particularly the calf)
- inappropriate training
- poor biomechanics
- foot posture
- poor footwear
- inadequate warm up
- muscle weakness

Prognosis of Achilles Tendinopathy

Most patients with Achilles tendonitis heal well with appropriate physiotherapy. This, however, can be a lengthy process and may take up to 6 months in those who have had Achilles tendinopathy for a long period of time. Early Physiotherapy treatment is vital to hasten recovery in all patients with Achilles tendinopathy, your Premier Physiotherapist can help you with this.

Treatment for Achilles Tendinopathy

The success rate of treatment for Achilles tendinopathy is largely dictated by patient compliance. One of the key components of treatment is that the patient rests from ANY activity that increases their pain until they are symptom free. This allows the body to begin the healing process in the absence of further tissue damage. Once the patient can perform these activities pain free, a gradual return to these activities is indicated provided there is no increase in symptoms.

Ignoring symptoms or adopting a 'no pain, no gain' attitude is likely to lead to the problem becoming chronic. Immediate, appropriate treatment in patients with Achilles tendinopathy is essential to ensure a speedy recovery. Once the condition is chronic, healing slows significantly resulting in markedly increased recovery times and an increased likelihood of future recurrence.

Following the **RICE (Rest, Ice, Compression, Elevation)** regime with anti-inflammatory medication may help to significantly reduce inflammation in the initial phase of Achilles tendinopathy if swelling of the sheath is present. A graduated flexibility (particularly of the calf muscles) and eccentric strengthening program under direction from a Physiotherapist is vital to ensure an optimal outcome.

Physiotherapy for Achilles Tendinopathy

Physiotherapy treatment for Achilles tendinopathy is vital to hasten the healing process, ensure an optimal outcome and reduce the likelihood of recurrence. Treatment may comprise:

- soft tissue massage
- the use of heel wedges
- stretches
- joint mobilization
- ice treatment
- exercises to improve strength, flexibility and balance
- education
- anti-inflammatory advice
- activity modification advice
- biomechanical correction
- a gradual return to activity program

Early intervention is the key to a quick recovery; see your Premier Physiotherapist for a FREE assessment today!

1. Kingma, J J, de Knikker, R, Wittink, H M, Takken, T (2007). Eccentric overload training in patients with chronic Achilles tendinopathy: a systematic review. *Br. J. Sports. Med.* 41: e3-e3
2. D Kader, A Saxena, T Movin, N Maffulli, (2002), Achilles tendinopathy: some aspects of basic science and clinical management. *Br. J. Sports Med.* 36: 239-249