

Achilles Tendonitis (Achilles Tendinopathy)

What is Achilles tendonitis?

Achilles tendonitis is a relatively common condition 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. The calf 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 tendonitis is a condition whereby there is damage to the tendon with subsequent degeneration and 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 tendonitis

Achilles tendonitis most commonly occurs due to repetitive or prolonged activities placing strain on the Achilles tendon. This typically occurs due to excessive walking, running or jumping activities. Occasionally, it may occur suddenly due to a high force going through the Achilles tendon beyond what it can withstand. This may be due to a sudden acceleration or forceful jump. Achilles tendonitis may also occur following a calf or Achilles tear or following a poorly rehabilitated sprained ankle. In athletes, this condition is commonly seen in running sports such as marathon, triathlon, football and athletics.

Signs and symptoms of Achilles tendonitis

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

Diagnosis of Achilles tendonitis

A thorough subjective and objective examination from a physiotherapist is usually sufficient to diagnose Achilles tendonitis. Occasionally, further investigations such as an Ultrasound, X-ray or MRI scan may be required to assist with diagnosis and assess the severity of the condition.

Prognosis of Achilles tendonitis

Most patients with this condition 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 tendonitis for a long period of time. Early physiotherapy treatment is vital to hasten recovery in all patients with this condition.

Treatment for Achilles tendonitis

The success rate of treatment for patients with this condition 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 (crutches are often required). 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 tendonitis 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 R.I.C.E. Regime with regular icing and anti-inflammatory medication may help to significantly reduce inflammation in the initial phase of Achilles tendonitis. A graduated flexibility and eccentric strengthening program (particularly of the calf muscles) under direction from a physiotherapist is vital to ensure an optimal outcome.

Contributing factors to the development of Achilles tendonitis

There are several factors which can predispose patients to developing this condition. 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 calfs)
- inappropriate training
- poor biomechanics
- foot posture
- poor footwear
- inadequate warm up
- muscle weakness
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Physiotherapy for Achilles tendonitis

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

- soft tissue massage
- electrotherapy (e.g. ultrasound)
- the use of heel wedges
- stretches
- joint mobilization
- ice or heat treatment
- exercises to improve strength, flexibility and balance
- education
- anti-inflammatory advice
- activity modification advice
- biomechanical correction
- a gradual return to activity program
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Further intervention for Achilles tendonitis

Despite appropriate physiotherapy management, some patients with this condition do not improve. When this occurs the treating physiotherapist or doctor will advise on the best course of management. This may include pharmaceutical intervention, corticosteroid injection, autologous blood injection or referral to appropriate medical authorities who will advise on any interventions that may be appropriate to improve the condition. A review with a podiatrist for possible orthotics may also be indicated.

Exercises for Achilles tendonitis

The following exercises are commonly prescribed to patients with this condition. You should discuss the suitability of these exercises with your physiotherapist prior to beginning them. Generally, they should be performed 1 - 3 times daily and only provided they do not cause or increase symptoms.

Lunge Stretch

Begin this exercise with your hands against the wall. Place the leg to be stretched in front of you as demonstrated. Keep your heel down. Gently move your knee forward over your toes until you feel a stretch in the back of your calf or Achilles tendon (figure 2). Hold for 15 seconds and repeat 4 times at a mild to moderate stretch pain-free.



Figure 2 – Lunge Stretch (right leg)

Calf Stretch

Begin this exercise with your hands against the wall. Place the leg to be stretched behind you as demonstrated. Keep your heel down, knee straight and feet pointing forwards. Gently lunge forwards until you feel a stretch in the back of your calf, knee or Achilles tendon (figure 3). Hold for 15 seconds and repeat 4 times at a mild to moderate stretch pain-free.



Figure 3 – Calf Stretch (left leg)

Calf Raises

Begin this exercise standing at a bench or chair for balance. Keep your feet shoulder width apart and facing forwards. Slowly move up onto your toes, raising your heels as far as possible and comfortable without pain. Then very slowly lower your heels to the floor (figure 4). Perform 10 - 20 repetitions.



Figure 4 – Calf Raises

If you need treatment for your Achilles tendon please contact me on +442866328200 or email info@lindaburke.co.uk