

Achilles Tendinopathy

This is a condition of the achilles tendon. The Achilles tendon attaches your calf muscle to your heel. It is the strongest tendon in the body and is placed under a great deal of stress with running and jumping activities.

Tendinopathy is a general term that means "tendon disorder". It encompasses all types of tendon problems and does not imply a particular diagnosis or mode of treatment required.

Achilles tendon problems typically occur:

- In the tendon sheath (which is a biological sleeve that surrounds the tendon), this is called a tenosynovitis
- At the point where the Achilles attaches to the heel (insertional tendinopathy)
- At the mid part of the tendon

Frequently this is a degenerative condition (or tendinosis) meaning that the tendon undergoes structural changes related to cell death and structural disintegration. This condition can develop in anyone at any age but is more common after middle-age or in sports persons.

Pain and Symptoms

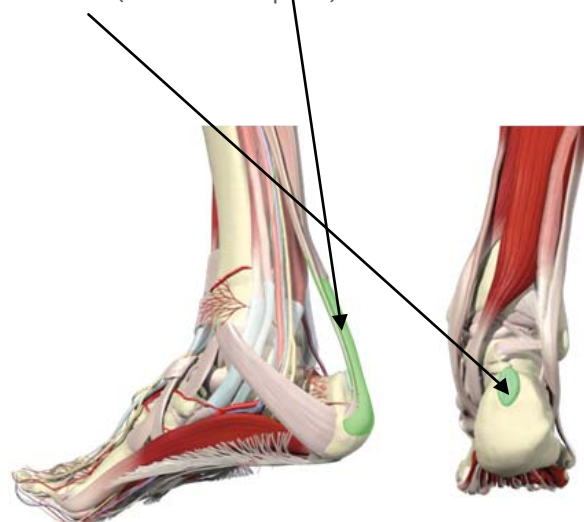
- Pain is typically worsened by activity, although lower grades of injury will sometime settle as they warm up.
- The pain is either through the mid-portion of the tendon or at the attachment into the heel.
- Some patients often report the feeling of crepitus in the tendon (some small grinding)
- Often there is a small to moderate lump in the tendon

Risk Factors

- Rapid increase in activity levels
- Over-training or inadequate recovery time
- Under activity (it is important to realise that all body tissues require a certain amount of activity for optimal health, and underactive tendons may undergo degenerative changes)
- Over-pronation which can place a larger load through the tendon
- Decreased flexibility and stiffness in the ankle
- Poor footwear
- Obesity
- Diabetes

Which Structures are Potentially Injured?

- Achilles tendon
- Tendon Sheath
- Bursa (a small fat pad) in the area



Diagnosis

The diagnosis is usually made from the history and from clinical testing. Further investigations such as x-ray, MRI and ultrasound can be undertaken to confirm the diagnosis and to assess other structures.

Treatment

Treatment may include:

Physiotherapy

- **Activity Modification** – Initial reduction in activity will help unload the affected tendon. This may include some cross training to help maintain physical condition and fitness levels.
- **Therapeutic Exercise** – An exercise program will be designed to facilitate tendon recovery. The type of program will include “eccentric exercises” which should be prescribed and supervised by a Physiotherapist
- **Footwear and Orthotics** – It may be appropriate to look at changing footwear and using some form of supportive orthotic; both are designed to help unload the tendon.

Medical

There are several promising medical treatments available. These need to be prescribed and administered by a Medical Doctor who has expertise in this area. **Some examples are:**

- **Cortisone** – Will typically only be suggested if there is an associated bursal or tendon sheath inflammation
- **Local Blood Injection** – This is designed to stimulate a healing response in the tendon. They use your own blood which contains growth factors.
- **Nitric Oxide Patches** – These are designed to help stimulate local blood flow to the affected area and they have also shown in research to help stimulate new collagen production in the tendon.

Recovery Time

Recovery from this condition is variable. It is important to realise that tendons take a long period of time to recover and some do not even recover completely. Often this condition can take up to 3 – 6 months to resolve and a preventative program is usually advised to help decrease the risk of recurrence.

If the condition fails to settle over an appropriate period of time and all conservative measures have been exhausted then referral to an Orthopaedic Surgeon specialist may be required.

Eccentric exercises

