Insertional Achilles Tendinopathy

Your Achilles tendon arises from the gastrocnemius and soleus muscles. It becomes a tendon in the mid calf and inserts over a broad area on to the heel bone (calcaneus).

What is Insertional Achilles Tendinopathy?
This is an overuse injury to the insertion of the tendon into bone. As you get older soft tissues become less elastic. When these tissues such as the Achilles tendon are loaded, instead of stretching they develop small cracks and splits. This is analogous to the effect of leaving a rubber band out in the sun-it cracks when stretched instead of being elastic.

There are many factors that can lead to this injury including: load (too much or too little), biomechanics, age, waist circumference & hormone levels.

What is a heel spur?
Bone spurs can develop at the insertion of the Achilles tendon over time and can grow up into the tendon and causing further damage. This causes bony prominence (see image) and rubbing in footwear.

What are the symptoms?
Symptoms may begin without an apparent injury. Initially patients may have pain for the first few steps in the morning that improves once they have taken a few steps. This is because the foot has been in a relaxed position overnight and the first few steps stretch the tendon and cause pain. A similar situation occurs when starting up from a seated position.
Symptoms commonly progress to activity related pain and rubbing then to more constant discomfort. Footwear can make symptoms worse by rubbing over the prominence.

What is the treatment?
80-90% of patients with insertional Achilles tendinopathy can be treated without an operation.

There are 3 stages of treatment
Symptom management – to settle reactive tendons before strengthening and loading can occur.

- Avoid aggravating activity
- Ice massage
- Anti-inflammatories
- Isometric calf raises
- Heel raise
- Night splint/Strassburg Sock- this has been shown to reduce morning pain
- Shoe modification to stop rubbing

Strengthening
Once the tendon is no longer ‘angry’ the goal is to load the Achilles tendon so the tendon quality improves.

- Walking a distance that doesn’t increase pain, then increase 10% per week
- Calf raises under physio guidance

Full loading
Aim to return to full loading without pain.

- Increase walking – 10% per week
- Single leg eccentric calf raises

What if these treatments don’t work?
If symptoms persist after a considerable period of diligent treatment, surgery may be required.