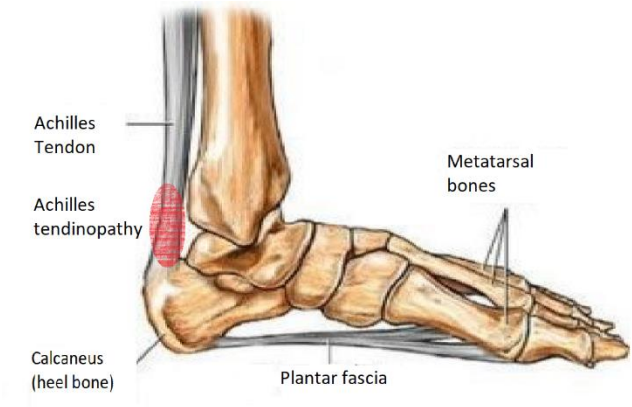
Achilles Tendinopathy

A patient's guide



What is Achilles tendinopathy?

The Achilles tendon connects the leg muscles of the calf to the heel bone. It allows you to move your foot up and down and plays a role in mobilisation (walking, running, jumping).

There are different reasons as to why an Achilles tendon becomes painful. Most cases are overuse injuries and tend to occur in middle aged athletes. It can also affect younger patients in certain cases. In some cases, medical conditions contribute to the weakening of the tendon. A high-arched or low-arched foot may increase the stresses on the Achilles tendon.

As we get older the tendon becomes less flexible and less able to absorb the repeated stresses the tendon undergoes. Eventually small "degenerative" tears develop in the fibres of the tendon. The body tries to repair these tears. Sometimes the repair process is successful. However, the blood supply of the lower part of the tendon is poor and the combination of this and the continued stresses mean that the tendon may not completely heal. Instead, the tendon and its lining become painful and swollen, and the tendon may feel weak.

Sometimes the tendon becomes weakened by the degenerative process to the extent that it tears completely.

What are the symptoms?

Pain and stiffness may be felt in Achilles tendon in the morning. This pain and swelling often worsens with activity and can be exacerbated after sporting activities. Eventually the tendon becomes thickened and tender and can occur with even light activity.

The disease process can either effect the main bulk of the tendon (non-insertional tendinopathy), or at its insertion into the heel bone (insertional tendinopathy). Insertional tendinopathy can be associated with a large bony spur and calcification at the heel bone, resulting in a bump on the heel, known as a Haglund deformity.

How is it diagnosed?

The diagnosis is often made on clinical history and examination. X-rays are helpful in diagnosing bone spurs. An ultrasound scan or MRI scan may be helpful in diagnosis and getting more information on the extent and severity of the disease.

What are the treatment options?

The vast majority of cases are treated without an operation. Usually the longer the symptoms have been present, the longer they will take to settle down.

Non-operative treatment includes rest, icing and painkillers and anti-inflammatory medication stretching, and regular paracetamol or anti-inflammatory medication. A period of rest in a walking boot or cast may be required in severe cases. Activity modification, voidance of certain sports and pre-sport stretches and warm up exercises are helpful.

Physiotherapy is an important part of the treatment. This includes an intensive program of calf stretches (the eccentric training programme). This can be highly effective **if followed correctly**. Sometimes insoles or braces (orthotics) may be helpful. Modifying sporting and training routines can also help.

Injection of the tendon with steroid is usually avoided as it can weaken the tendon. Occasionally there is a small bursa, or bag of fluid secondary to inflammation, which can be injected with steroid.

Other non-operative treatments include shockwave therapy. This is application of focused shock waves to the area of diseased tendon to try and incite a healing response. This is given over 3 courses. It is important to continue with stretches and physiotherapy during this treatment.

If these treatments don't work, then surgery may be considered. This is more likely to be the case if the pain has been present for six months or more.

What are the benefits of surgery?

The surgery is successful in approximately 80% of cases. The aim of surgery is to relieve the pain in the ankle. There may still be some limitations in the sporting activities thereafter.

Summary of surgery.

The surgery is usually performed as a day case. It is usually performed under a general anaesthetic. Local anaethetic is often given after the surgery to help with pain relief.

The nature of the surgery depends if you have insertional, or non-insertional disease.

In non-insertional tendinopathy, the damaged tendon is thinned and cleaned. The damage is then repaired. If there is extensive damage one of the tendons which moves your big toe may be used to reinforce the damaged Achilles tendon.

In insertional tendinopathy there is often rubbing of the tendon by a prominent part of the heel bone. This bone is removed. In removing the bone the attachment of the tendon to the bone may be weakened. In these cases the reattachment of the tendon to the bone may need to be reinforced with sutures and bone anchors.

After your surgery

Your foot will be in a partial cast. You will need to be non-weightbearing for a few weeks. You should keep your foot elevated on a chair/pillow and take regular painkillers.

What are the risks with surgery?

The general risks with surgery include

- Bleeding – rarely may there be bleeding with results in a collection of blood under the wound. Bruising is common after this procedure
- Swelling – common after surgery and can take many months to eventually settle down. Elevation is key to reducing this.
- Stiffness – exercises are important to reduce the stiffness in the toes after surgery

- Infection – infections can be treated with antibiotics. Deeper infections which are much rarer may require further surgery.
- Nerve injury – this may cause some numbness in the ankle/foot.
- Scarring – some scars can be prominent or dark in colour. This usually fades with time.
- Clots in leg/lung – your risk of clots will be assessed prior to surgery and appropriate treatment/advice will be given.

The specific risks to this surgery include

- Wound healing problems – occasionally the wound may be slow to heal and sometimes split apart. This usually settles with rest and antibiotics. In severe cases further surgery may be required. This risk is increased in diabetics and smokers.
- Ongoing pain – despite surgery, some patients may still have symptoms of pain and swelling. Further surgery may be recommended in some cases.
- Tendon detachment/rupture – this may need a further operation to repair.
- Chronic regional pain – This is excessive pain after surgery and is a very rare complication.

Advice after surgery

The foot should be strictly elevated for the first 2 weeks to avoid excessive swelling which could compromise the wound. Aim to keep the foot elevated for 55 minutes of every hour

The dressings should not be disturbed unless there is a concern with the wound. At around 2 weeks after surgery, you will return to the clinic to have the cast and stitches removed and a new cast applied

You may shower the limb after the stitches have been removed and the wound is fully healed and/or when the cast has been removed. Before that time keep the wound and surrounding area dry and clean.

You will have a period of non-weightbearing and protected weightbearing in a cast or walking boot. You may need crutches. The physiotherapist will show you how to use them. The exact times will be discussed with you by your surgeon.

It may take several weeks before you can drive. Please check with your insurer.

Going back to work depends on the activity undertaken at work and should be discussed with your surgeon.

There is often a lengthy recovery process following surgery. Physiotherapy is essential after surgery. It may take several months before swelling subsides. Return to recreational walking and light activities can take up to 6 months. Return to more intensive sports can take between 9 months to one year .Often a full recovery takes much longer than one would expect – up to 18 months .This is a normal recovery. If you are slower than these times do not panic, they are only averages, but let your surgeon know when you attend clinic.

If I have any questions or concerns?

These guidelines are to help you understand your operation. This level of detail may cause concern, anxiety, or uncertainty. Please let your doctor or nurse know so that we may address these issues.

We aim to see you back in the clinic at regular intervals to monitor your progress and answer any questions you may have during your recovery.

If there is concern regarding the wound, such as increased redness, pus, discharge, or pain, then seek medical attention either at your GP or nearest Emergency department.

Above all else, please do not proceed with surgery unless you are satisfied and understand all you want to know about the operation.

Further information

There are a number of places that you can look at for further information. These days commonest and easiest way is to look in the internet. You can also ask your surgeon or General Practitioner. Below are a few web sites that you may find useful.

https://www.bofas.org.uk/patient/patient-information

(under Achilles tendon - pain)

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