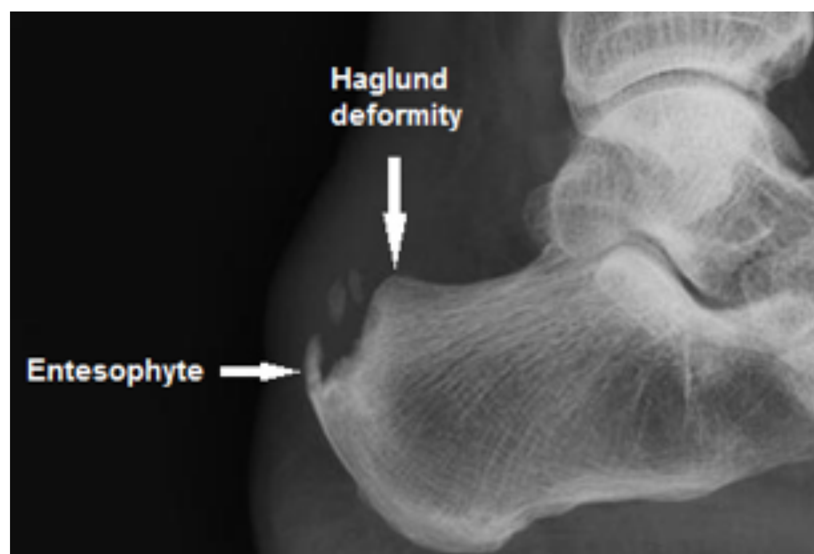
Surgery for Insertional Achilles Tendinopathy

What is Insertional Achilles Tendinopathy?

The Achilles tendon (or heel cord) is the largest tendon in the human body. It connects the calf muscles to the heel (calcaneus). Insertional Achilles tendinopathy is degeneration / inflammation of the fibres of the tendon directly where it attaches (insertion) to the heel bone. It may be associated with inflammation of a fluid-filled sac (bursa) or tendon itself.

There may be a bony enlargement on the back of the heel (Haglund's deformity) which can cause mechanical irritation. The soft tissue near the Achilles tendon becomes irritated when the bony enlargement rubs against shoes. This often leads to painful bursitis (inflammation of the bursa). In some patients X-rays may show calcification deposits within the tendon at its insertion into the heel (entesophyte).



What are the indications for surgery?

In the majority of patients, non-surgical treatment remains effective with the use of non-steroidal anti-inflammatory drugs/ gels, heel lifts, stretching and shoes that do not provide pressure over this area. Cortisone injections are not recommended for the treatment of these types of problems because they can weaken the tendon and make it easier to rupture. However, if bursitis (inflammation of bursa) is the main pain generator, a one off cortisone injection into the bursa could be considered.

Surgical treatment is indicated if there is failure of several months of nonsurgical treatment. Several different approaches and techniques, including endoscopy, are used to achieve these goals.

What type of surgery is suitable for me?

The extent of inflammation and whether you have calcification within the tendon decides the type of surgery.

1) Resection of Haglund's deformity and bursa

   This procedure is undertaken when you have a Haglund's deformity and bursitis (Haglund's syndrome) with minimal / no calcification within the tendon

2) Resection of entesophyte including partial detachment & reattachment of tendon

   This procedure is undertaken when you have calcification within the tendon. It involves having to detach part of the tendon off the heel bone and reattaching it once the calcification has been removed. If you have a Haglund's deformity, this will also be removed.

The best surgical technique for your Achilles tendon will be determined based on your symptoms and findings.

How is the operation done?

You will be admitted on the day of operation. The operation takes about 45 min to 1 hour and is routinely done under a general anaesthetic. Occasionally a spinal anaesthetic may be considered. Most patients go home the same day.

1) Resection of Haglund's deformity and bursa

   - The removal of the Haglund's deformity and bursa can be done endoscopically (‘keyhole’ operation) or open, depending on the extent of involvement. In the ‘keyhole’ operation, 2 keyhole incisions are made on either side of the tendon and the bone and bursa are removed using ‘keyhole’ instruments. In the open technique, a small incision (4 – 5 cm) is made on one side of the tendon to allow surgical access for the procedure.

   - Following surgery, a bulky dressing (bandage), boot or backslab plaster is applied to protect the ankle. Weight-bearing and type of immobilisation is dictated by the extent of surgery on the tendon. Most patients would be able to partial weight-bear immediately following surgery. As the tendon does not need to be detached from the heel bone, recovery is shorter.

2) Resection of entesophyte including partial detachment & reattachment of tendon

   - A single incision (5 – 6 cm) centred over the tendon insertion is made. The Achilles tendon is partially detached off the bone. Part of the diseased tendon is removed. The calcification within the tendon and Haglund's deformity is removed using surgical instruments. The tendon is then re-attached to the bone using bone anchors.

   - Following surgery, a backslab plaster is applied. You will be non-weight bearing on the operated leg for at least 2 weeks. After 2 weeks, you will be allowed to increase

your weight-bearing on the operated leg over a period of 6 weeks. You will be using a boot / plaster cast during this stage

After the operation

It is important to keep the leg elevated as much as possible especially for the first 2 weeks. You will usually be able to go home when you feel ready. You will need to arrange for someone to drive you home. You should try to have a friend or relative stay with you for the first 24 hours.

Your first clinic follow-up is usually 12 to 14 days after surgery.

Wound care – The bandage / backslab should be kept dry. At yours fist clinic appointment, would inspection and suture removal would be undertaken.

Work - If you have a sedentary job you should be able to return to work within 2 weeks (if you can arrange safe transport). If your job is physical, you may need to stay off work until the boot / cast is removed.

What risks are there involved in the procedure?

- Infection
- Nerve damage – causing numbness and painful scar
- Deep vein thrombosis (DVT) and pulmonary embolism (PE) – blood clots in the vein or lungs
- Tendon rupture
- Prolonged swelling and stiffness
- Prolonged recovery
- Residual pain

It is beyond the scope of this document to identify all the most extreme (less than one in a thousand) risks that you might be prone to but we will be very happy to discuss any worries about specific concerns and also about any family history or your own personal history of problems in the past which are much more relevant. If there is anything you do not understand or if you have any questions or concerns, please feel free to discuss them with us.

Author: Dev Mahadevan FRCS Tr & Orth