

Surgery to reconstruct chronic Achilles tendon rupture

This leaflet will explain what will happen when you come to the hospital for an operation to reconstruct a chronic Achilles tendon rupture.

What is the Achilles tendon?

The Achilles tendon (or heel cord) is the largest tendon in the human body. It connects the calf muscles (gastrocnemius and soleus) to the heel (calcaneus). Its function is to help in bending the foot downwards at the ankle (this movement is called plantar flexion). An example of this is going up on your tiptoes; it also helps to push us forward when walking or running.

If the tendon is torn, this is called an Achilles tendon rupture. If the injury is detected early, it can be treated using a boot or surgical repair. However, if the presentation following injury is delayed (more than 6 weeks), this is called a *chronic* Achilles tendon rupture. Boot therapy at this stage is unlikely to help and direct surgical repair may not be possible. In this scenario, an Achilles tendon reconstruction may be considered.

What type of surgery is suitable for me?

The degree of damage to the tendon and how far apart the tendon ends have separated decides the type of surgery. If the tendon ends can be brought together without too much tension, a direct surgical repair could still be undertaken. However, if the tendon ends cannot be brought together, your surgeon would perform either:

1. Flexor Hallucis longus (FHL) tendon transfer: Using another foot tendon to replace and strengthen the Achilles tendon.
2. Calf muscle lengthening (V-Y advancement) with repair: Lengthening the calf muscle to allow tendon ends to be brought together and repaired.

The best surgical technique for your Achilles rupture will be determined by your foot and ankle orthopaedic surgeon.

How is the operation done?

You will be admitted on the day of operation. The operation takes about 1½ to 2 hours and is routinely done under a general anaesthetic (you are asleep). Occasionally a spinal anaesthetic (you are awake but the area is numbed and you may be drowsy) may be considered. You will either be able to go home the same day or may be kept in overnight, depending on individual circumstances.

The operation is done through a single incision at the back of the ankle (the length of the incision is dependent on the type of reconstruction undertaken). Further incisions may be required for additional procedures.

1. **FHL tendon transfer:** The FHL tendon is one of two tendons that bend your big toe. The tendon is cut at the back of the ankle and transferred into to the heel bone through a bone tunnel. It is secured using a non-metallic screw. Most patients do not notice any loss of strength to the big toe and the toe continues to function without limitations.
2. **V-Y advancement and repair:** The calf muscle is lengthened above the torn tendon by releasing the aponeurosis (sheet-like fibrous membrane that binds muscle together) to allow the torn tendon ends to be brought together. The tendon is then repaired. The wound is closed with dissolvable stitches. Your ankle will be protected in a below-knee back slab.

After the operation

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. Pain can be moderate to the scale of 4-5 out of 10. You will need some painkillers for the first few days. It is important to keep the leg elevated as much as possible especially for the first 2 weeks.

You will be non-weight bearing on the operated leg for up to 6 weeks and have a below-knee cast / boot for that time to protect the ankle. After 6 weeks, you will be allowed to increase your weight bearing on the operated leg. You will be using a boot during this stage, for around 3 to 4 weeks. At this stage, you may remove the boot intermittently to do range of movement exercises.

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

Wound care – The ankle would be protected in a back slab for 2 weeks. This should be kept dry. At your first clinic appointment, examination 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 is removed.

Recovery period – This procedure has a lengthy recovery and will take 12 to 18 months to achieve its maximum potential benefit.

Driving / travel – You will not be able to drive until the cast / boot is removed and this may take up to 10 weeks. The only exception is if you drive an automatic AND your LEFT ankle is operated on; you may start driving 2 weeks following surgery. It is advisable to check the terms of your car insurance to ensure your cover is valid, as some policies state that you must not drive for a specific time period after an operation.

It is important to stress that prolonged journeys, are not recommended for a fortnight after surgery, and air flight is strongly discouraged for up to 6 weeks after surgery.

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.

- Rupture of the reconstruction.
- Prolonged swelling and stiffness.
- Prolonged recovery.
- Residual weakness.

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 exposed 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 your doctor or nurse.

Useful numbers and contacts

Adult Day Surgery Unit:	0118 322 7622
Redlands Ward:	0118 322 7484 / 7485
Pre-operative Assessment:	0118 322 6546
Occupational Therapy	0118 322 7560
Physiotherapy	0118 322 7812

Any concerns you may have during the first 24 hours following your discharge from hospital please telephone the ward you were on. After 24 hours please contact your GP.

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Trauma & Orthopaedics, March 2023. Next review due: March 2025