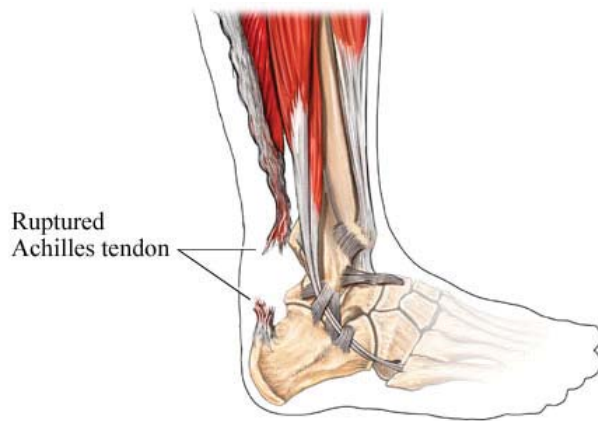


Achilles Tendon Rupture



Type of Procedure:	Overnight stay (24 hrs)
Length of Procedure:	1 hour
Anaesthesia:	General anaesthetic

Rupture or tearing of the Achilles tendon is a common condition and typically occurs in an individual who undertakes sporting activity to which they are unaccustomed.

For example, the invitation to play tennis after a prolonged period of little or no exercise. However, tears can also occur in those who play sport regularly but it is usually the more explosive take-off/high impact landing action sports that are responsible (although tears can occasionally occur after simply stumbling when walking). Essentially, there is a vigorous contraction of the calf muscle and the Achilles tendon tears. The patient often describes the sense that someone or something has hit the back of their leg producing sudden pain. Although it is possible to walk, it is painful and the leg is weak.

While it is possible to treat ruptures of the Achilles tendon non-operatively (plaster), this is often associated with a substantially higher re-rupture rate (average 18%) than operative treatment (risk of re-rupture after surgical repair of the tendon <3%) and can also result in a weaker calf muscle/tendon unit.

Surgery is performed in order to regain maximum strength of the Achilles and push-off strength of the foot. The strength of the muscle depends on establishing the exact correct tension between the muscle and the tendon, and this is restored most accurately by surgically repairing the torn tendon ends.

This surgery involves a general anaesthetic. An incision is made over the ruptured tendon at the back of the calf at or just above the level of the ankle. The surgical technique needs to be meticulous and great care taken with the skin in order to minimise the risk of wound healing problems. Modern surgical techniques mean that the risk of serious wound problems after this type of surgery is very small (~1%).

Main Risks Of Surgery

Swelling/Scar - Initially the foot and ankle will be swollen and needs elevating. The swelling will disperse over the following weeks and months but will remain evident for up to 6-9 months. The scar can cause irritation to begin with but usually settles to a great extent over the first 4-6 weeks.

Wound healing problems – The risk of serious wound healing problems is approximately 1%. It is important to keep the foot elevated over the first 10 days to reduce the swelling and risk of wound healing problems. In rare circumstances when the wound is problematic, further surgery can sometimes be required.

Infection – The risk of deep infection occurring is approximately 1%. You will be given intravenous antibiotics to help prevent this. It is important to keep the foot elevated over the first 10 days to reduce the swelling and risk of infection. If there is an infection, it may resolve with a course of antibiotics but may require a period of hospitalisation or rarely, further surgery.

Nerve damage – The sural nerve is close to the incision. This supplies sensation to the outside of the foot. This may rarely (1%) be damaged during the surgery and this may leave a patch of numbness on the outside of the foot. This numbness may be permanent but would not affect function.

Re-rupture of the Achilles Tendon – Following surgical repair of the tendon the risk of further rupture is less than 3% (compared to an average of 18% in reports of non surgical treatment of this injury). It is very important that patients follow the post operative instructions provided to minimise the risk of such problems. cont...

Deep Vein Thrombosis (DVT) – This is a clot of blood in the deep veins of the leg. The risk of a clot occurring is reported as less than 1% after foot and ankle surgery which is generally substantially lower than after hip or knee surgery. Suspicion of DVT is raised if the leg becomes very swollen and painful. There are tests that can be performed to confirm/exclude the presence of a DVT. If confirmed, you will probably require treatment with a blood thinning agent (heparin preparation and / or warfarin). The main concern with regards a DVT is that rarely (<1:1000 chance with foot and ankle surgery) a piece of clot can break away in the leg and travel to the lungs which is much more serious and can be life-threatening. This is called a pulmonary embolus and signs of this include chest pain and shortness of breath.

Whilst in hospital following surgery it is likely that you will be treated with a blood thinning agent (LMWH - low molecular weight heparin injections) to minimise the risk of DVT / PE but this does not afford total protection. You will be given a venous compression stocking to wear on the uninjured leg and exercises to keep the toes and knee moving are advised, as well as remaining generally mobile.

If you are concerned that the leg has become more swollen and painful (some swelling always occurs after surgery), or if you experience chest pain/shortness of breath, then you should contact the hospital, general practitioner, or accident and emergency department immediately.

Sick Leave

In general 4 weeks off work is required for sedentary employment, 12 weeks for standing or walking work and 16 weeks for manual / labour intensive work. We will provide a sick certificate for the first 2 weeks; further certificates can be obtained from your GP.

Driving

ONLY IF left leg surgery only and automatic vehicle should you expect to return to driving is usually possible after outpatient review at 2 weeks post surgery - otherwise unable to drive until 3 months post surgery.

These notes are intended as a guide and some of the details may vary according to your individual surgery or because of special instructions from your surgeon.

Post Operative Course

Achilles Tendon Repair

Day 1

- Below knee cast (backslab plaster) applied at end of surgery
- Expect some numbness in foot for 12-24 hours
- Pain medication and elevation of foot
- Blood drainage through cast expected
- Treatment with LMWH injections

Day 2

- Elevation of leg as much as possible for first 2 weeks
- Mobilisation non-weight bearing with physiotherapist (crutches/frame)
- Discharge home day 2 or 3 usually possible
- No weight bearing on operated leg for first 4 weeks
- May shower/bath if able to keep leg dry

2 Weeks

- Outpatient review of wounds (and removal stitches if necessary)
- Cast replaced with boot including heel wedges
- No weight bearing on operated leg/boot until 4 weeks post surgery
- Patient to remain in boot at all times (except for supervised physio)
- Supervised physiotherapy may begin. Only include:
 - Swelling control - ice, elevation, effleurage and massage as appropriate
 - Scar mobilisation
- No stretches/active exercises until 4 weeks post surgery
- No unsupervised boot removal
- May return to driving at this stage ONLY IF left leg surgery only and automatic vehicle - otherwise unable to drive until 3 months post surgery

4 Weeks

- 1 Outpatient review and removal of (2) heel wedges as appropriate
- 3 Allowed to partially weight bear on operated leg with crutches/frame
- 4 Supervised physiotherapy to continue (+ unsupervised exercise may begin) as instructed by physiotherapist including:
 - a Swelling control - ice, elevation, effleurage and massage
 - b Scar mobilisation
 - c Assisted/active PF, DF Inversion/eversion exercises to begin gently

cont...

6 Weeks

- Outpatient review and further wedges removed
- Usually allowed to begin full weight bearing in boot at this stage
- Boot removed for bathing / showering at this stage
- To remain in boot until 8 weeks following surgery
- Physiotherapy to continue:
 - a Swelling control – ice, elevation, effleurage and massage
 - b Scar mobilisation
 - c Assisted / active PF, DF Inversion / eversion exercises
 - d Gait progression work
 - i Aim for walking without walking aids (if plantegrade achieved)
 - ii Aim to achieve walking with parallel bars out of boot prior to week 8 (usual stage of boot removal)

8 weeks (2 months)

- 1 Physiotherapy to continue:
 - a Scar mobilisation
 - b Assisted / active PF, DF Inversion / eversion exercises
 - c Boot removed (by physio once functional dorsiflexion achieved)
 - d Begin double stance heel raises and continue strengthening
 - e Single gel heel insert in shoe - worn until 12 weeks after surgery
 - f May begin proprioceptive work after week 8

12 weeks (3 months) onwards

1. Outpatient review
2. Physiotherapy to continue:
 - a Begin single stance heel rise exercises
 - b Begin jogging on trampoline and treadmill via walk-run programme
 - c Eventually progress 20 minute outdoor run before adding cutting
 - d Progress later to figure of eight drills as appropriate

sussexfoot&anklecentre

The Sussex Foot & Ankle Centre was founded in 2005 by two orthopaedic surgeons, David Redfern and Stephen Bendall, with the aim of providing a high quality specialist service for the diagnosis and treatment of all foot and ankle problems. Both orthopaedic surgeons are specialists in problems affecting the foot and ankle and have many years of experience. They operate the service with outpatient clinics at the Brighton and Haywards Heath Nuffield Hospitals.

The sussex foot and ankle center strives to provide the best advice and treatment for all foot and ankle problems. This includes sports injuries and trauma, bunions, metatarsalgia, and arthritis. Both surgeons have particular interests in minimally invasive surgery and are at the forefront of developing such techniques in this country.

Both surgeons are also academically very active and have appointments within the national (BOFAS) and international (EFAS) professional foot and ankle surgery societies.

David J Redfern
MBBS, FRCS, FRCS (Tr & Orth)
Consultant Orthopaedic Surgeon

Stephen P Bendall
MBBS, FRCS, FRCS (Orth)
Consultant Orthopaedic Surgeon

Private Secretary 01273 627060
Direct Fax 01273 627061
Email admin@sussexfoot.com

Haywards Heath
Sussex Nuffield Hospital
Burrell Road, Haywards Heath
East Sussex RH16 1UD
Tel 01444 456999

Brighton
Sussex Nuffield Hospital
Warren Road, Woodingdean
East Sussex BN2 6DX
Tel 01273 627060