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## Achilles Tendon Rupture: A Patient Guide

### What Have I Done?

You have ruptured (completely torn) the largest and strongest tendon in the body. It connects the calf muscles to the heel and is essential for normal use of the foot. Ruptures usually occurs in those aged 30 – 70 years, during a sudden forceful push off from the foot. Without proper healing of the tendon, you will have a permanent limp and weakness when using the leg.

### How is it Treated?

Debate remains regarding the best form of treatment for a ruptured Achilles tendon. The 2 options are: immobilisation or operation. A recent meta-analysis of scientific studies showed that, compared to immobilisation, an operation reduces the risk of re-rupture and allows a quicker return to work. An operation is not without risk and these must be balanced against the benefit of a lower re-rupture rate. Both treatments involve immobilisation for 8 weeks.

### Immobilisation (no operation)

Mr Gordon utilises the best scientific evidence available for management in patients choosing not to have surgery. See Treatment Options Summary table below for an outline of management.

### The Operation

This is a day case procedure performed under general anaesthetic. An incision is made near the tendon and the ends are carefully sutured together. Mr Gordon uses the latest suture technology, coupled with a scientifically proven stitching technique, which creates a very strong fixation, allowing accelerated rehabilitation by early weight bearing and physiotherapy starting at 2 weeks.

### What are the Complications of an Operation?

The actual risk of a complication is individual to you and will depend on a number of factors. Mr Gordon will discuss these with you. Risks are very low for fit and healthy, non smokers, but increase with age, smoking, diabetes and other chronic diseases. Complications include: Infection, wound healing difficulties, nerve injury, deep vein thrombosis and adhesions.

### Post Operation Accelerated Rehabilitation Protocol

Please see the separate Patient Guide 'Achilles Tendon Repair: Post Operative Accelerated Rehabilitation Protocol' at [www.davidgordonortho.com](http://www.davidgordonortho.com).

# Achilles Tendon Rupture: Patient Guide

## Treatment Options Summary

Non Operative	Operative
4 weeks in plaster non weight bearing with crutches	2 weeks in plaster non weight bearing with crutches
4 weeks in walking boot full weight bearing	6 weeks in walking boot full weight bearing
Lower complication rate	Higher complication rate
Higher re-rupture rate	Lower re-rupture rate
Slower return to activities	Faster return to activities

## What Should I Do?

This will depend on your discussion with Mr Gordon. In general, if you are active (and want to return to those activities), fit and healthy and a non smoker, an operation is advised, if you are a smoker, diabetic or have other medical problems, non operative management is advised.

## Immobilisation (no operation) Rehabilitation Protocol

Week (from injury)	Support	Weight Bearing Status
1 - 4	Plaster in equinus (tip toe)	Non weight bear
5 + 6	Walking boot – 2 heel raises (16°)	Full weight bear
7 + 8	Walking boot – 1 heel raises (10°)	Full weight bear
After 8	Normal Shoe	Full weight bear

## Operation Rehabilitation Protocol

Post Operative Week	Support	Weight Bearing Status
1	Plaster	Touch weight bear
2	Plaster	Touch weight bear
3	Boot – 3 heel raises (22°)	Full weight bear
4	Boot – 3 heel raises (22°)	Full weight bear
5	Boot – 2 heel raises (16°)	Full weight bear
6	Boot – 2 heel raises (16°)	Full weight bear
7	Boot – 1 heel raises (10°)	Full weight bear
8	Boot – 1 heel raises (10°)	Full weight bear
After 8	Normal Shoe	Full weight bear

(x° = Degrees of plantar flexion using Aircast heel raises)

## Reference List

- Wallace RG, Heyes GJ, Michael AL The non-operative functional management of patients with a rupture of the tendo Achillis leads to low rates of re-rupture. *J Bone Joint Surg Br* 2011;93:1362-6.
- Cetti, R., L. O. Henriksen, and K. S. Jacobsen. "A new treatment of ruptured Achilles tendons. A prospective randomized study." *Clin.Orthop.Relat Res.*308 (1994): 155-65.
- Costa, M. L., et al. "Immediate full-weight-bearing mobilisation for repaired Achilles tendon ruptures: a pilot study." *Injury* 34.11 (2003): 874-76.
- Kangas, J., et al. "Early functional treatment versus early immobilization in tension of the musculotendinous unit after Achilles rupture repair: a prospective, randomized, clinical study." *J.Trauma* 54.6 (2003): 1171-80.
- Maffulli, N., et al. "Early weightbearing and ankle mobilization after open repair of acute midsubstance tears of the achilles tendonrch this journal." *Am.J.Sports Med.* 31.5 (2003): 692-700.
- Mortensen, H. M., O. Skov, and P. E. Jensen. "Early motion of the ankle after operative treatment of a rupture of the Achilles tendon. A prospective, randomized clinical and radiographic study." *J.Bone Joint Surg.Am.* 81.7 (1999): 983-90.
- Suchak, A. A., et al. "Postoperative rehabilitation protocols for Achilles tendon ruptures: a meta-analysis." *Clin.Orthop.Relat Res.* 445 (2006): 216-21