

# UK heel fracture trial: surgical treatment versus non-operative care

<b>Submission date</b> 07/02/2006	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 22/02/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 28/07/2014	<b>Condition category</b> Musculoskeletal Diseases	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof Damian Griffin

**Contact details**  
Warwick Medical School  
Clinical Sciences Building  
Research Wing  
Clifford Bridge Road  
Coventry  
United Kingdom  
CV2 2DX  
+44 (0)2476 968618  
damian.griffin@warwick.ac.uk

## Additional identifiers

**Protocol serial number**  
15964

## Study information

**Scientific Title**

Improved functional outcome in heel fracture with surgical treatment versus non-operative care: a randomised controlled trial

### **Study objectives**

Surgical treatment leads to improved functional outcome compared with non-operative care.

Please note that as of 09/02/2009 the trial start and end dates of this record were updated. The initial dates at the time of registration were:

Initial anticipated start date: 01/01/2006

initial anticipated end date: 30/06/2010

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Oxfordshire REC A, 24/05/2006, ref: 06/Q1604/58

### **Study design**

Observer blind randomised controlled trial

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

### **Health condition(s) or problem(s) studied**

Calcaneal fracture

### **Interventions**

Intervention: open reduction and internal fixation by extensile lateral approach

Control: non-surgical treatment with elevation and ice followed by spintage and early mobilisation

### **Intervention Type**

Other

### **Phase**

Not Applicable

### **Primary outcome(s)**

The Kerr Calcaneal Fracture Score (a validated, reliable, patient-derived outcome instrument for pain and function following calcaneal fracture, accepted by surgeons working in the area)

### **Key secondary outcome(s)**

Amended as of 09/02/2009:

Point four has been amended as follows:

4. Gait and foot pressure analysis using F-Scan for gait analysis. This is an in shoe pressure system which also enables objective assessment of various parameters of gait.

Initial information at time of registration:

1. Complications, including wound dehiscence, infection, mal-union, non-union and radiographic arthritis
2. General health using the SF-36 questionnaire
3. American Orthopaedic Foot and Ankle Society Hind Foot Score
4. Gait and foot pressure analysis using GAITRite (a simple portable pressure sensitive mat connected to a laptop computer that enables objective assessment of various parameters of gait including walking speed, step length, and dynamic contact pressures)
5. Health status using EQ-5D
6. Resource use will be monitored for the economic analysis. National Health Service (NHS) costs will be collated for each trial arm. Cost-consequences will be monitored via short questionnaires. In addition, average time off work or reduced working hours attributed to the condition in both groups will be recorded.

**Completion date**

30/11/2010

## **Eligibility**

**Key inclusion criteria**

1. Closed displaced intra-articular fractures of the calcaneus
2. Aged over 18 years, no upper age limit, either sex

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

Amended as of 09/02/2009:

1. Calcaneal fracture with severe deformity resulting in fibula impingement
2. Previous calcaneal abnormality (infection, tumour or deformity)
3. Other serious injuries to either lower limb that would interfere with rehabilitation of the index calcaneal fracture
4. Peripheral vascular disease (defined as having been investigated or treated for poor lower limb circulation)
5. Other contra-indication to surgery, defined as:
  - 5.1. Severe cardiac impairment, e.g. heart or valve replacement, arrhythmia, previous myocardial infarction
  - 5.2. Severe respiratory impairment, e.g. chronic obstructive pulmonary disease, asthma that has

required hospital admission

5.3. Any other systemic medical condition that would produce a specific contraindication to a general anaesthetic

6. Evidence that the patient would be unable to adhere to trial procedures or complete questionnaires, such as dementia or intravenous drug abuse

Initial information at time of registration:

1. Diabetes
2. Peripheral vascular disease, or other local or systemic contra-indication to surgery
3. Injury to the ipsilateral leg
4. Very severe deformity with the lateral wall of the calcaneus impinging upon the fibula

**Date of first enrolment**

01/06/2006

**Date of final enrolment**

30/11/2010

## Locations

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

**Warwick Medical School**

Coventry

United Kingdom

CV2 2DX

## Sponsor information

**Organisation**

University Hospitals Coventry and Warwickshire NHS Trust (UK)

**ROR**

<https://ror.org/025n38288>

## Funder(s)

**Funder type**

Charity

**Funder Name**

Arthritis Research Campaign (ARC) (UK) (ref: 15964)

## Results and Publications

**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	24/07/2014		Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes