

Effectiveness of radial shock wave treatment or tissue-specific plantar fascia-stretching in patients with chronic plantar heel pain

Submission date 25/10/2009	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
Registration date 17/11/2009	Overall study status Completed	<input type="checkbox"/> Protocol
Last Edited 09/10/2015	Condition category Musculoskeletal Diseases	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

Contact name
Prof Jan D. Rompe

Contact details
OrthoTrauma Evalaution Center
Mainz
Germany
D-55130

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
N/A

Study information

Scientific Title

Effectiveness of radial shock wave treatment or tissue-specific plantar fascia-stretching in patients with chronic plantar heel pain: a randomised controlled observer-blinded trial

Study objectives

Null hypothesis:

Radial shock wave treatment or tissue specific stretching or radial shock wave treatment in combination with tissue specific stretching provide comparable outcomes at 4 months follow-up.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Institutional Review Board of the "Orthopädie im Centrum", Alzey, Germany, approved on the 3rd July 2005

Study design

Randomised controlled observer-blinded trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Plantar fasciopathy

Interventions

Patients are randomly allocated to three sessions of radial shock wave treatment or to plantar fascia stretching:

Group I: plantar fascia-specific stretching (PFSS), 3 x per day, for eight weeks

Group II: Radial shock wave therapy (RSWT), performed 3 x in weekly intervals

Group III: PFSS + RSWT

Follow-up: at 2 months, four months, and 15 months from baseline. Main follow-up is 4 months.

Intervention Type

Other

Phase

Not Applicable

Primary outcome measure

Overall heel pain reduction measured by the percentage change of the VAS composite score 4 months after beginning of treatment compared with baseline, with last value carried forward (LVCF) replacement of missing values with the last recorded value.

Secondary outcome measures

1. 6-point Likert scale (fully recovered or significantly improved as success criteria) at 0, 4 and 12 months from baseline
2. Plantar fascia thickness measured before and 4 months and 15 months from baseline
3. Roles and Maudsley Score measured before and 4 months and 15 months from baseline
4. Number of patients achieving 80 points at at month 4, and at month 15 from baseline in the patient's function assessed using the validated 100-point AOFAS (American Orthopaedic Foot and Ankle Society) Ankle-Hindfoot-Score

Overall study start date

01/07/2007

Completion date

01/01/2010

Eligibility

Key inclusion criteria

1. History of plantar fasciitis for more than 6 months
2. Numeric Rating Scale (NRS) score persistingly (at least 5 points for pain during the first few steps of walking in the morning)
3. Localised pain on palpation of the proximal plantar fascia
4. Be willing to abstain from any other treatments or medications during the treatment and follow-up period

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

250

Key exclusion criteria

1. Less than 18 years of age
2. Receiving local injections less than 3 months prior to the randomisation visit
3. Receiving physical therapy less than 3 months prior to the randomisation visit
4. Receiving non-steroidal anti-inflammatory drugs (NSAIDs) for any chronic conditions whether or not related to plantar fasciitis prior to the randomisation visit

5. Receiving systemic therapeutic anticoagulants
6. Bilateral plantar fasciitis
7. History and/or physical findings of lower extremity dysfunction, local arthritis, generalised poly-arthritis, rheumatoid arthritis, ankylosing spondylitis, local arthrosis
8. Neurologic abnormality (changes of deep tendon reflexes, motor or sensory deficit)
9. Arthrosis of the foot or ankle, as confirmed by x-ray diagnosis (AP, lateral views)
10. Previous surgery of the foot
11. Participation in a Workman's Compensation Program or plans to apply for the Program
12. Thrombopathy, infection, tumour, diabetes mellitus, systemic lupus, severe cardiac disease or other severe systemic diseases
13. Pregnancy

Date of first enrolment

01/07/2007

Date of final enrolment

01/01/2010

Locations

Countries of recruitment

Germany

Study participating centre

OrthoTrauma Evalaution Center

Mainz

Germany

D-55130

Sponsor information

Organisation

OrthoTrauma Evaluation Center (Germany)

Sponsor details

Oppenheimer Str. 70

Mainz

Germany

D-55130

Sponsor type

Research organisation

Funder(s)

Funder type

Research organisation

Funder Name

OrthoTrauma Evaluation Center (Germany)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration