The clinical and cost effectiveness of footwear and orthotic therapy in the management of the neuropathic diabetic foot - a single blind randomised controlled trial

Submission date	Recruitment status	Prospectively registered
29/09/2006	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
29/09/2006	Completed	Results
Last Edited	Condition category	Individual participant data
29/03/2012	Nutritional, Metabolic, Endocrine	Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Mrs Joanne Paton

Contact details

FF21 Peninsula Allied Health Centre University of Plymouth Derriford Road Plymouth United Kingdom PL6 9BH +44 1752 238845 joanne.paton@plymouth.ac.uk

Additional identifiers

Protocol serial number N0184175869

Study information

Scientific Title

Study objectives

To determine whether therapeutic shoes used with 2 types of inserts reduce peak pressure in the at-risk diabetic foot, and to determine which of the orthotics is most effective.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Added 29 July 2008:

Ethical approval was granted by Cornwall and Plymouth Research Ethics Committee on 24/01/2006, prior to the commencement of recruitment.

Study design

Single blind randomised controlled trial.

Primary study design

Interventional

Study type(s)

Not Specified

Health condition(s) or problem(s) studied

Nutritional, Metabolic, Endocrine: Diabetes

Interventions

The participants will be taken from both referrals and the existing caseload of the North and East Cornwall PCT Podiatry Service and Plymouth PCT podiatry service. Each participant will be required to complete a questionnaire and sign a consent form before taking part in the study. Each participant will receive a diabetic assessment of the lower limb to determine if they present with an increased risk of foot ulceration. Identification of the increased-risk foot include a neurological foot assessment. Each participant will be randomly assigned to one of two groups: Group 1 will receive 2 pairs of orthopaedic shoes and a custom made moulded insert Group 2 will receive 2 pairs of orthopaedic shoes and inlay

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

Plantar peak pressure for the entire plantar surface during the stance phase of gait.

Key secondary outcome(s))

Added 29 July 2008:

- 1. Forefoot pressure time integral
- 2. Total contact area

- 3. Rate of forefoot loading
- 4. Duration of load as a percentage of stance
- 5. Perceived foot health
- 6. Quality of life
- 7. Cost

Completion date

02/03/2008

Eligibility

Key inclusion criteria

- 1. The subject must be diagnosed as type I or II diabetic
- 2. The subject must be identified as neuropathic and at risk of ulceration
- 3. The subject must not currently be suffering from any lower limb vascular or neuropathic ulceration identified by scoring Grade 0 on the Wagner classification for foot ulcer
- 4. The subject must be ambulant. Must be able to walk a minimum of approximately 10 metres unaided
- 5. The subject must be willing to comply with the requirements of the study

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Not Specified

Sex

Not Specified

Key exclusion criteria

- 1. Subjects with current ulceration or recently healed less than 6 months prior to enrolling onto the study (as the focus of the study is preventative ulcer management rather than treatment)
- 2. Subjects with severe fixed midfoot or rearfoot deformity ie Charcot joint (subjects would be unsuitable for prefabricated insoles and non-bespoke footwear)
- 3. Subjects with a history of bone and joint surgery of the lower limb including amputation (could lead to alteration in gait kinetics and may not be suitable for non bespoke insoles and footwear)
- 4. Subjects lacking the ability to comprehend simple instructions and comply with the study protocols and procedures (including those not able to read printed English)
- 5. Allied Health Professional students as they may be considered to have a dependant relationship with the investigator
- 6. Subjects diagnosed as neuropathic caused by pathology other than diabetes

Date of first enrolment

03/03/2006

Date of final enrolment

Locations

Countries of recruitment

United Kingdom

England

Study participating centre
FF21 Peninsula Allied Health Centre
Plymouth
United Kingdom
PL6 9BH

Sponsor information

Organisation

Record Provided by the NHSTCT Register - 2006 Update - Department of Health

Funder(s)

Funder type

Government

Funder Name

Plymouth Primary Care Trust - Exeter PCT (UK) NHS R&D Support Funding

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details

Other publications systematic review

Date created Date added Peer reviewed? Patient-facing?

01/01/2011