

Do knee braces or foot insoles help pain and function in patients with knee osteoarthritis?

Submission date 22/02/2008	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
Registration date 03/03/2008	Overall study status Completed	<input type="checkbox"/> Protocol
Last Edited 04/01/2013	Condition category Musculoskeletal Diseases	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title
Biomechanical assessment of medial compartment knee osteoarthritis before and after surgery

Study objectives

1. There is no significant difference in the knee kinematics or kinetics in patients with medial compartment knee osteoarthritis when wearing the valgus knee brace or lateral wedged insole
2. There is no significant difference in the clinical outcome scores in patients with medial compartment knee osteoarthritis when wearing the valgus knee brace or lateral wedged insole
3. There is no significant difference in the knee kinematics or kinetics or clinical scores between the two treatments (valgus knee braces and lateral wedged insoles)

Ethics approval required

Old ethics approval format

Ethics approval(s)

1. Stockport Local Research Committee. Date of approval: 01/12/2003 (ref: 03/12/2363)
2. Salford and Trafford Local Research Ethics Committee (ref: 03/12/2363)

Study design

Randomised controlled crossover trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Knee osteoarthritis

Interventions

Arm 1: A valgus knee brace which is classed as a direct orthotic

Arm 2: A lateral wedged insole which is classed as an indirect orthotic

Cross-over: Two week intervention period and a two-week wash-out period to account for carry-over effects from the first treatment.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

1. Knee adduction moment
2. Knee kinematics and kinetics

These outcomes were assessed at the following timepoints:

T1: Baseline assessment and start of wear of intervention 1

T2: Two weeks following wear of intervention 1

T3: Two weeks after no treatment to deal with carry over effects, and start of intervention 2

T4: Two weeks following wear of intervention 2

Key secondary outcome(s)

1. Western Ontario and McMaster Osteoarthritis Index (WOMAC), Pain and Function Subscales
2. Knee Pain Visual Analogue Scale (VAS) (0 = no pain, 10 = extreme pain)

These outcomes were assessed at the following timepoints:

T1: Baseline assessment and start of wear of intervention 1

T2. Two weeks following wear of intervention 1

T3. Two weeks after no treatment to deal with carry over effects, and start of intervention 2

T4. Two weeks following wear of intervention 2

Completion date

01/10/2006

Eligibility

Key inclusion criteria

1. Male and female between 45 and 75 years of age
2. Medial compartment knee osteoarthritis symptoms
3. Diagnosis confirmed on radiographs
4. Able to walk and stand on one leg for about three seconds

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Previous knee pain or any other musculo-skeletal conditions
2. Currently wears orthoses of any description prescribed by a podiatrist or orthotist
3. Tricompartamental knee osteoarthritis and/or clinical evidence of patellofemoral disease or knee pathology (other than medial compartment osteoarthritis) likely to be causing their knee pain
4. Unable to walk unsupported or stand on affected leg for 3 seconds
5. Severe coexisting medical morbidities

Date of first enrolment

01/03/2003

Date of final enrolment

01/10/2006

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Room PO18

Salford

United Kingdom

M6 6PU

Sponsor information

Organisation

University of Salford (UK)

ROR

<https://ror.org/01tmqtf75>

Funder(s)

Funder type

University/education

Funder Name

University of Salford (UK)

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?
Results article	results	01/03/2013		Yes	No