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Does lateral malleolus posterior glide taping affect ankle evertor muscle strength in recurrent ankle sprain?

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
23/04/2015	Injury, Occupational Diseases, Poisoning	[ ] Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
N0236164465

Study information

Scientific Title
Does lateral malleolus posterior glide taping affect ankle evertor muscle strength in recurrent ankle sprain?

Study objectives
To evaluate evertor muscle strength in recurrent ankle sprain and the effect of a taping technique.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Not provided at time of registration

Study design
Randomised controlled cross-over trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Not specified

Study type(s)
Treatment

Participant information sheet

Health condition(s) or problem(s) studied
Injury, Occupational Diseases, Poisoning: Ankle sprain

Interventions
Concentric and eccentric peak torque of evertor muscles will be measured at a constant velocity using an isokinetic dynamometer, the Cybex 6000 machine (Cybex, 2100 Smithtown Avenue, PO Box 9003, Ronkonkoma, NY 11779-0903). The Cybex software calculates and displays measures of muscle activity, eg. Peak torque, muscle work. This has been chosen as the cybex provides a more sensitive measures of muscle strength than that of more crude manual muscle testing (Munn et al 2003). Subjects will be positioned on the machine in supine with the hip and knee of the tested limb secured at 90 degrees flexion. The foot will be secured on the foot plate with the ankle in neutral. Prior to testing, the CYBEX machine will be calibrated to the individual's end rage of inversion and eversion.

The participants will be asked to complete a self-report functional questionnaire (adapted from de Bie et al 1997) which will determine the level of stability of the injured ankle. Both ankles of each subject will be tested, with the uninjured ankle acting as a control. Each ankle will be tested

under three different conditions. To avoid experimental bias, the order of intervention and which ankle to test first will be randomised using random numbers (names drawn out of a hat).

1. Without tape
2. With tape and LMPG (active intervention)
3. With tape placed on skin without tension (placebo)

The LMPG will be applied as described by Mulligan (1999). The glide will be held in place with rigid adhesive tape (Hetherington 1996). To ensure consistency, the same researcher will apply the mobilisation each time. This will also be the case for application of tape.

Preparation for the study including a small pilot will be completed in September 2004. Data collection for the study will take place from October 2004 to February 2005 with final interpreting and analysis in March/April 2005.

Final Report May 2005

Intervention Type
Other

Phase
Not Specified

Primary outcome measure
Measurements of torgue (peak torgue), power and muscle work will be determined using the cybex.

Secondary outcome measures
Not provided at time of registration

Overall study start date
07/10/2004

Completion date
01/07/2006

Eligibility

Key inclusion criteria
1. Healthy adult male and female subjects
2. Age 18-65
3. Who attend St Georges Hospital who have had a history of recurrent ankle sprain, on at least two occasions, with the most recent episode occurring more than 4 weeks ago
4. Unilateral functional ankle instability, assessed by a self-report functional questionnaire (adapted from de Bie et al 1997)

Participant type(s)
Patient

Age group

Adult

Lower age limit
18 Years

Upper age limit
65 Years

Sex
Both

Target number of participants
20

Key exclusion criteria
1. Past history of orthopaedic surgery or fracture to the ankle
2. Any history of neurological conditions affecting balance or strength
3. Ankle pain at rest
4. Any known allergic reaction to tape

Date of first enrolment
07/10/2004

Date of final enrolment
01/07/2006

Locations

Countries of recruitment
England

United Kingdom

Study participating centre
St George's Hospital Medical School
London
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Sponsor information

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

Sponsor details

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Government

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Funder(s)

Funder type
Government

Funder Name
St George's Healthcare NHS Trust (UK), NHS R&D Support Funding

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