

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

Submission date
29/09/2006

Recruitment status
No longer recruiting

☐ Prospectively registered

☐ Protocol

Registration date
29/09/2006

Overall study status
Completed

☐ Statistical analysis plan

☐ Results

Last Edited
23/04/2015

Condition category
Injury, Occupational Diseases, Poisoning

☐ Individual participant data

☐ Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

N0236164465

Study information

Scientific Title

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

Study objectives

To evaluate evetor 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

Primary study design

Interventional

Study design

Randomised controlled cross-over trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Injury, Occupational Diseases, Poisoning: Ankle sprain

Interventions

Concentric and eccentric peak torque of evetor 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(s)

Measurements of torque (peak torque), power and muscle work will be determined using the cybex.

Key secondary outcome(s)

Not provided at time of registration

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

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Upper age limit

65 Years

Sex

All

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

United Kingdom

England

Study participating centre

St George's Hospital Medical School

London

United Kingdom

SW17 0RE

Sponsor information

Organisation

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

Funder(s)

Funder type

Government

Funder Name

St George's Healthcare NHS Trust (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