Tape versus brace treatment of ankle distortion

Submission date 21/03/2011	Recruitment status No longer recruiting	Prospectively registered
		☐ Protocol
Registration date	Overall study status	Statistical analysis plan
28/07/2011	Completed	☐ Results
Last Edited	Condition category	Individual participant data
28/07/2011	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

Contact name

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Contact details

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Additional identifiers

Protocol serial number

NL20031.068.07

Study information

Scientific Title

Prospective randomized controlled trial comparing tape versus semi-rigid brace treatment of patients with grade II and III ankle ligament rupture

Acronym

TAPELOC

Study objectives

Treatment of lateral ankle sprain with a semi-rigid brace leads to less local complications and more patient satisfaction than treatment with tape. Reduction in complications will improve patient satisfaction with the treatment method and this will improve functional outcome by enhancing compliance with the treatment method used.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Maastricht University Medical Center Ethical Committee, 03 December 2007, ref: MEC07-2-094

Study design

Prospective randomized controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Ankle distortion, ankle ligament rupture

Interventions

- 1. Tape treatment: after randomisation tape immobilisation is started 5-8 days after initial treatment with immobilisation using bandage
- 2. Taping is performed by a select group of experienced and skilled healthcare professionals of the outpatient clinic
- 3. The tape consists of three layers
- 4. The first layer is a latex free, adhesive, bandage to protect the skin (Coban, 3M)
- 5. The second layer consists of 2.5cm non-elastic strapping tape (Leukotape, Beiersdorff) used for support
- 6. The third layer consists of Elastoplasts 6cm broad, elastic used for fixation of the second layer (BDF, Beiersdorf)
- 7. This taping is applied twice with two weeks interval
- 8. The other group is treated with a semi-rigid brace (AirLoc ® Bauerfeind, Zeulenroda, Germany)
- 9. After instructions to the patient how to reapply the brace, revision of these instructions is made after 2 weeks
- 10. Total duration of both treatment is 4 weeks
- 11. Follow-up duration is 12 weeks after randomization

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

1. Patient satisfaction is assessed by verbal rating scale: poor (5), moderate (4), sufficient (3), good (2) and excellent (1) both at 2 and 4 weeks after start of the study treatment

- 2. Level of pain is evaluated using the visual analogue scale at baseline, 2, 4, 8 and 12 weeks
- 3. Ankle joint function is assessed using the validated Karlsson scoring scale at 2, 4, 8 and 12 weeks after start of the study treatment
- 4. Range of motion is measured using an electronic goniometer at 2, 4, 8 and 12 weeks after start of the study treatment

Key secondary outcome(s))

Any complications of the treatments

Completion date

31/12/2011

Eligibility

Key inclusion criteria

Patients were included if they sustained a grade II or III ankle sprain (significant damage to lateral ligaments defined by the presence of a lateral hematoma and tenderness at the anterior lateral ligament without or with instability) and were presented in the outpatient clinic within 5-7 days.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Other

Sex

Αll

Key exclusion criteria

- 1. Fracture
- 2. Age was under 16 or over 55 years
- 3. If they had experienced a previous ankle sprain or fracture
- 4. If they sustained swelling that makes tape treatment impossible

Date of first enrolment

01/01/2008

Date of final enrolment

31/12/2011

Locations

Countries of recruitment

Netherlands

Study participating centre Department of Surgery Maastricht Netherlands 6226 BV

Sponsor information

Organisation

Maastricht University Medical Center (Netherlabnds)

ROR

https://ror.org/02d9ce178

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Maastricht University Medical Center (Netherlands)

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?

Participant information sheet 11/11/2025 No Yes