Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of the effects of kinesio-taping and neoprene ankle brace on ankle proprioception in athletes with recurrent ankle sprain

Protocol summary

Summary

Introduction: One of the worst problems which occur after about 80% of ankle sprains is the recurrence of sprain. One major reason for the recurrence of ankle sprains is proprioceptive deficit. This study was compared the effect of kinesio-tape and neoprene brace, on ankle proprioception in athletes with recurrent ankle sprain. Methods: Sixty-six athletes with recurrent ankle sprain randomly allocated to one of the three groups (group I: kinesio-tape; group II: neoprene brace; group III: control). Subjects who had swelling or edema in lower limb were excluded. The mean error in reproduction of 10 and 30 degrees of plantar flexion and 5 and 20 degrees of inversion were measured before and after the interventions. Results: In all four target angles, the accuracy of angle reproduction in the group I and group II after the interventions was significantly improved compared with before intervention. Additionally in all four target angles this improvement in the accuracy of angle reproduction in the group I and group II was significantly greater than in control group. Conclusion: We concluded that kinesio-tape and neoprene brace can be effective interventions for improving ankle proprioception in athletes with recurrent ankle sprain.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014041217235N1**
Registration date: **2014-08-21, 1393/05/30**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2014-08-21, 1393/05/30

Registrant information

Name
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Name of organization / entity
Shiraz University of Medical Science
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Recruitment status

Recruitment complete

Funding source

Shiraz University of Medical Sciences

Expected recruitment start date

2013-05-08, 1392/02/18

Expected recruitment end date

2013-10-12, 1392/07/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effects of kinesio-taping and neoprene ankle brace on ankle proprioception in athletes with recurrent ankle sprain

Public title

The effect of kinesiotape and neoprene brace on proprioception of sprained ankle in athletes

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: age 20 to 35 years old; regular sport activity for at least a year; recurrent ankle sprain
Exclusion criteria: disability in walking or running; acute

pain; swelling or edema in lower limb; hypersensitivity to tape or brace

Age
From **20 years** old to **35 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **66**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
The ethics commitee of Shiraz University of Medical Sciences

Street address
Shiraz University of Medical Sciences, Zand st., Shiraz, Iran

City
Shiraz

Postal code

Approval date
2012-10-22, 1391/08/01

Ethics committee reference number
ct-926724

Health conditions studied

1

Description of health condition studied
recurrent ankle sprain

ICD-10 code
M24.2

ICD-10 code description
Instability secondary to old ligament injury

Primary outcomes

1

Description
Error in reproduction of different angles of ankle

Timepoint
Before and early after intervention

Method of measurement
Angle reproduction test by biodex machine

Secondary outcomes

empty

Intervention groups

1

Description
First intervention group: application of kinesiotape on injured ankle

Category
Rehabilitation

2

Description
Control group: no intervention was applied.

Category
N/A

3

Description
Ssecond intervention group: application of neoprene brace on injured ankle

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Rehabilitation school of shiraz

Full name of responsible person
Mr. Saba salemi

Street address
Rehabilitation school of shiraz, 1st abiverdi St., Shiraz, Iran

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Shiraz Universiy of Medical Sciences

Full name of responsible person
Dr. Seyed Basir Hashemi

Street address
Shiraz Universiy of Medical Sciences, Zand St, Shiraz, Iran
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Shiraz
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shiraz Universiy of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

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Name of organization / entity
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty