

Clinical Trial Protocol

Iranian Registry of Clinical Trials

15 Jul 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

saba salemi

Name of organization / entity

Shiraz University of Medical Science

Country

Iran (Islamic Republic of)

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+98 71 1627 1552

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sailemis@sums.ac.ir

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 committee 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.,
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City

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shiraz University of Medical Sciences

Full name of responsible person

Dr. Seyed Basir Hashemi

Street address

Shiraz University of Medical Sciences, Zand St, Shiraz,
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City

Shiraz

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Shiraz University 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**Contact****Name of organization / entity**

Student Research Committee, Shiraz University of
Medical Sciences

Full name of responsible person

Mr. Saba Salemi

Position

Master of Science in Sport Physiotherapy

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Web page address**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