Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Effect of 6 weeks neuromuscular training on muscle strength, balance, range of motion & proprioceptive in males with lateral ankle sprain

Protocol summary

Summary

This study aimed to investigate the effect of six weeks of neuromuscular training on muscle strength, balance, range of motion and preconception in men with lateral ankle ligament sprains. This intervention study was a non-blinded clinical trial. The main inclusion criteria were: male patients with lateral ankle ligament sprains (grade I and II) in the dominant leg؛ injured within the last 6 months and ranging in age from 18 to 35 years who received routine physiotherapy when entering the study and had no pain and swelling. The exclusion criteria were: presence of other injuries in the lower extremities؛ damages affecting the balance (scoliosis and amputation), history of inner ear problems and vertigo؛ any kind of problem in the nervous system؛ problems with vision which were not corrected؛ age over 35 years and under 18 years؛ not completing the therapy sessions until the end of the 6th week for any reason and also the injured ankle not being in the dominant leg. A total of 17 male patients with lateral ankle ligament sprains performed neuromuscular training for six weeks and the effect of these exercises on muscle strength, balance, range of motion and preconception will be measured.

General information

Acronym

lateral ankle sprain

IRCT registration information

IRCT registration number: **IRCT2014091619190N1**
Registration date: **2014-12-17, 1393/09/26**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2014-12-17, 1393/09/26

Registrant information

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Name of organization / entity
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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for research of University of Tehran Kish International Campus

Expected recruitment start date

2014-02-20, 1392/12/01

Expected recruitment end date

2014-11-22, 1393/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of 6 weeks neuromuscular training on muscle strength, balance, range of motion & proprioceptive in males with lateral ankle sprain

Public title

Effect of 6 weeks neuromuscular training

Purpose

Treatment

Inclusion/Exclusion criteria

The main inclusion criteria were: male patients with lateral ankle ligament sprains (grade I and II) in the dominant leg؛ injured within the last 6 months and

ranging in age from 18 to 35 years who received routine physiotherapy when entering the study and had no pain and swelling. The exclusion criteria were: presence of other injuries in the lower extremities؛ damages affecting the balance (scoliosis and amputation), history of inner ear problems and vertigo؛ any kind of problem in the nervous system؛ problems with vision which were not corrected؛ age over 35 years and under 18 years؛ not completing the therapy sessions until the end of the 6th week for any reason and also the injured ankle not being in the dominant leg.

Age
From **18 years** old to **35 years** old

Gender
Male

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **18**

Randomization (investigator's opinion)
Not randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics Committee of Tehran University Kish International Cumpus

Street address
Kish

City
Kish

Postal code

Approval date
2014-09-16, 1393/06/25

Ethics committee reference number
2302

Health conditions studied

1

Description of health condition studied
lateral ankle sprain

ICD-10 code
S93.4

ICD-10 code description
sprain and strain of ankle

Primary outcomes

1

Description
muscle strength

Timepoint
pretest , post test

Method of measurement
isokinetic machine

2

Description
proprioceptive

Timepoint
pretest , post test

Method of measurement
isokinetic machine

Secondary outcomes

1

Description
range of motion

Timepoint
pretest,posttest

Method of measurement
goniometer

2

Description
balance

Timepoint
pretest,posttest

Method of measurement
biodex balance system

Intervention groups

1

Description
exercise therapy, 6 weeks , 3 times a week , 45,60 min per time

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Farda physiotherapy clinic
Full name of responsible person
Dr. Yahya Sokhangoei
Street address
Tehran
City
Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for research of University of Tehran Kish International Campus
Full name of responsible person
Dr.Rajabi
Street address
Kish
City
Kish
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice Chancellor for research of University of Tehran Kish International Campus
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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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